ORDER NO. MKE0301800C1

B3

Service Manual

DVD/VCR DECK

PV-D4733S / PV-D4743 / PV-D4743S / PV-D4743S-K

SPECIFICATIONS

ITEM		SPECIFICATION
VCR	Video	Head: 4 rotary heads helical scanning system
		Input Level: VIDEO IN Jack (Phono type) 1.0 Vp-p 75 Ω unbalanced Output Level: VIDEO OUT Jack (Phono type) 1.0 Vp-p 75 Ω unbalanced Signal-to-Noise Ratio: SP: more than 43 dB LP/SLP: more than 41 dB Horizontal Resolution: Color/Monochrome: more: SP: 230 lines LP/SLP: 220 lines
	Audio	Head: Normal Mono: 1 stationary head Hi-Fi Stereo: 2 rotary heads
		Input Level: AUDIO IN Jack (Phono type) -10 dBv 50 kΩ unbalanced Output Level: AUDIO OUT Jack (Phono type) -8 dBv 1 kΩ unbalanced
		Frequency Response: Normal Mono: SP: 100 Hz-9 kHz LP: 100 Hz-6 kHz SLP: 100 Hz-5 kHz Hi-Fi Stereo: SP/LP/SLP: 20 Hz-20 kHz
		Signal-to-Noise Ratio: Normal Mono: SP: more than 42 dB LP/SLP: more than 40 dB Hi-Fi Stereo: SP/LP/SLP: more than 80 dB
		Wow and Flutter: Normal Mono: SP: Less than 0.2 % WRMS LP: Less than 0.3 % WRMS SLP: Less than 0.4 % WRMS Hi-Fi Stereo: Less than 0.015 % WRMS
	Tuner	Broadcast Channels: VHF 2-13, UHF 14-69 CABLE Channels: Midband A through I (14-22) Superband J through W (23-36) Hyperband AA-EEE (37-64) Lowband A-5-A-1 (65-99) Special CABLE channel 5A (01) Ultraband 85-94, 100-125
	Tape Format	Tape width 12.7 mm (1/2 inch) high density tape

ITEM		SPECIFICATION
VCR	RF Out	CH 3/CH 4 switchable 72 dBμ (open voltage) 75 Ω unbalanced
	Tape Speed	SP: 1-5/16 i.p.s (33.35 mm/s), LP: 21/32 i.p.s (16.67 mm/s), SLP: 7/16 i.p.s (11.12 mm/s) Record/Playback Time: 8 hr. with 160 min. type tape used in SLP mode FF/REW Time: Less than 2-1/2 min. (120 min. type tape) *Note: FF/REW Time may be exceed specification according to tape condition.
DVD	Discs Played	(1) DVD-VIDEO disc: 12 cm (5 inch) single-sided, single-layer 12 cm (5 inch) single-sided, double-layer 12 cm (5 inch) double-sided, double-layer (one layer per side) 8 cm (3 inch) single-sided, single-layer 8 cm (3 inch) single-sided, double-layer 8 cm (3 inch) double-sided, double-layer (one layer per side) (2) Compact disc (CD-DA, VIDEO CD) 12 cm (5 inch) disc, 8 cm (3 inch) disc
	Digital Audio Output	Digital optical connector
	Pickup	Wave length: 655 nm (DVD), 750 nm (Video CD/CD) Laser power: CLASS II
GENERAL	Power	Source: 120 V AC±12 V AC, 60 Hz±3 Hz
		Consumption: Approx. 32 W (Power on), Approx. 4 W (Power off)
	Television System	EIA Standard (525 lines, 60 fields) NTSC Color Signal
	Operating Condition	5 °C-40 °C (41 °F-104 °F) (Temperature) 10 %-75 % (Humidity)
	Dimension (W x H x D)	430 mm x 95.5 mm x 344 mm (16-15/16 inch x 3-12/16 inch x 13-9/16 inch)
	Weight	4.9 kg (10.8 lbs.)
	Solder	This model uses lead free solder (Pb-F).

Weight and dimensions shown are approximate.
Designs and specifications are subject to change without notice.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

1. SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List. It is essential that these criticalparts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

2. **An Isolation Transformer should always be used during the servicing of DVD VCR whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personalinjury from electrical shocks. It will also protect DVD VCR from being damaged by accidental shorting that may occur during servicing.**
3. **When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.**
4. **After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.**
5. **After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.**

LEAKAGE CURRENT COLD CHECK

1. **Unplug the AC cord and connect a jumper between the two prongs on the plug.**
2. **Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to thechassis, the reading should be between 1 M Ω and 5.2 M Ω . When the exposed metal does not have a return path to the chassis, the reading must be infinity.**

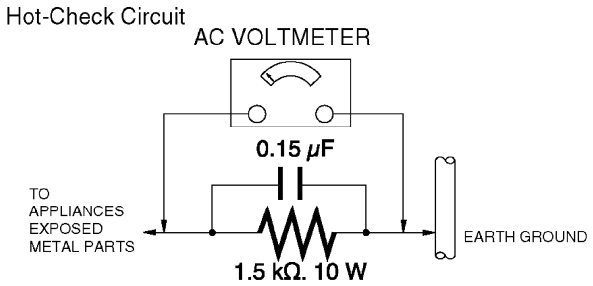
LEAKAGE CURRENT HOT CHECK
(See figure 1.)

1. **Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.**
2. **Connect a 1.5 k Ω , 10 W resistor, in parallel with a 0.15 μ F capacitor, between each exposed metallic part on the set and a good earth**

ground, as shown in figure 1.

3. Use an AC voltmeter, with 1 k Ω /V or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 V RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks. Leakage current must not exceed 1/2 mA. In case a measurement is outside of thelimits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

Figure 1



1.1. LASER PRODUCT

CLASS I LASER PRODUCT

- This equipment is certified to comply with DHHS Rules 21 CFR Chapter 1, Subchapter J in effect as of date of manufacture. (Only for U.S.A.)

This equipment is classified as a Class I (Class 1) level LASER Product and there is no hazardous LASER radiation with the safety protection.

Caution:

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Danger:

The serviceman should not remove the cover of drive unit and should not service because the drive unit is a non- serviceable parts. Please check that the labels.

Never touch the internal parts in order to avoid EXPOSURE TO VISIBLE LASER RADIATION.
Unplug the AC power cord to the equipment when opening the top cover.
When the power switch is On, do not place your eyes close to the front panel opening door or the other openings to look into the interior unit.
LASER Specification
Class I level A LASER Product (Class 1 level A LASER Product)

Wave Length:

647 - 677 nm (at DVD) / 775 - 815 nm (at CD)

Laser Power:

No hazardous radiation is emitted with the safety protection.

1.2. PRECAUTION OF LASER DIODE

CAUTION:

This unit utilizes a class III a laser. Visible laser radiation is emitted from the optical pickup lens when the unit is turned on:

1. **Do not look directly into the pickup lens.**
2. **Do not use optical instruments to look at the pickup lens.**
3. **Do not adjust the preset variable resistor on the optical pickup.**
4. **Do not disassemble the optical pickup unit.**
5. **If the optical pickup is replaced, use the manufactures specified replacement pickup only.**
6. **Use of control or adjustment or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

2. PREVENTION OF ELECTRO-STATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits, some field-effect transistorsand semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould remove electrostatic charge for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**

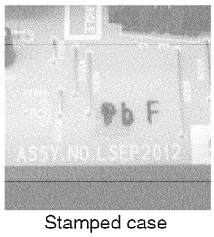
4. **Use only an antistatic solder removal device. Some solder removal devices not classified as "antistatic (ESD protected)" can generate electrical charge sufficient to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparableconductive material).**
7. **Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.**
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. **Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD)sufficient to damage an ES device).**

"NOTE to CATV system installer:
This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding systemof the building, as close to the point of cable entry as practical."

3. ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:
PCBs (manufactured) using lead free solder will have a PbF stamp or printing on the PCB.
(Please refer to figures.)

Printed case



Stamped case

CAUTION:
- Pb free solder has a higher melting point than standard solder;
  Typically the melting point is 50 °F - 70 °F (30 °C - 40 °C) higher.
  Please use a soldering iron with temperature control and adjust it to 700 °F±20 °F (370 °C± 10 °C).
  In case of using high temperature soldering iron, please be carefull not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100 °F/600 °C).
- All products with the printed circuit board with PbF stamp or printing must be serviced with lead free solder.
  When soldering or unsoldering, completely remove all of the solder from the pins or solder area,
  and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

Recommendations
Recommended lead free solder composition is Sn96.5 Ag3.0 Cu0.5.

4. SERVICE NOTES (PLEASE READ)

4.1. SERVICE NOTES

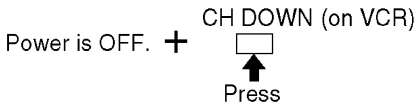
4.1.1. SIMPLIFIED FAULT FINDING DATA

Simplified Self-Diagnostic System facilitates finding the cause of the fault. A 3-digit fault code will be displayed in F.I.P.

The Simplified Fault finding data is stored in the Memory IC (IC6005). This data is cleared after it is displayed, and then the POWER button is pressed back on.

1. With power turned off, press CH DOWN button on VCR (for over 3 seconds if VCR is not in shut off condition).

Fig. 1-1



2. Fault code (3-digit number) will be displayed in F.I.P. as shown.

Fig. 1-2

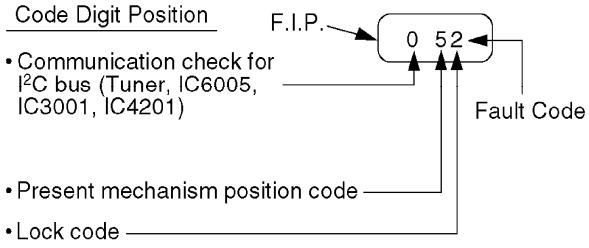


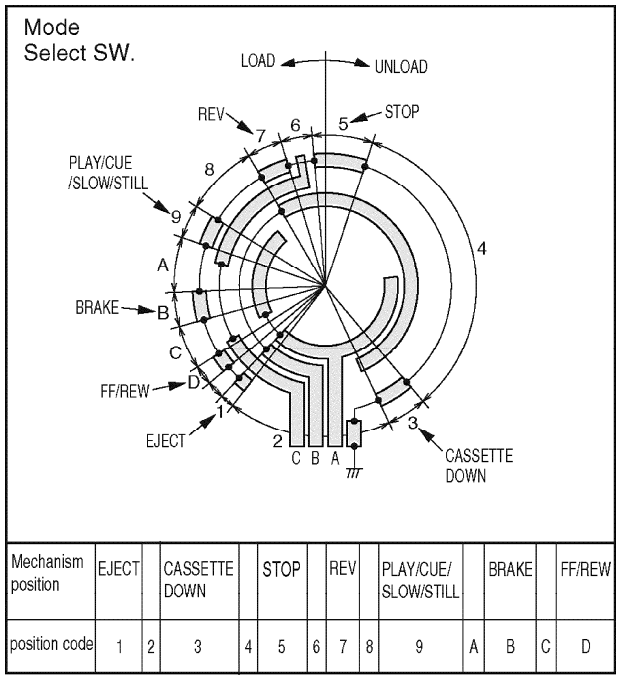
Fig. 1-3

Explanation of Codes	Code No.		
Communication check for I²C bus (Tuner, IC6005, IC3001, IC4201) (Refer to Fig. 1-4.)	0 ~ F		
Present Mechanism Position Code Mechanism Position is indicated. (Refer to Fig. 1-5.)		1 2 3 4 5 6 7 8 9 A B C D	
Lock Code (See Note) • VCR is not in shut-off condition. • Reel lock. • Cylinder lock. • Exceeds loading/unloading time. (Mechanism Lock) • Exceeds Cassette loading/unloading time. (Cassette Lock)			0 1 2 3 4

Fig. 1-4

Communication check for I²C bus (IC6001◄►Tuner)	Communication check for I²C bus (IC6001◄►IC6005)	Communication check for I²C bus (IC6001◄►IC3001)	Communication check for I²C bus (IC6001◄►IC4201)	Code No.
OK	OK	OK	OK	0
			NG	1
		NG	OK	2
			NG	3
	NG	OK	OK	4
			NG	5
		NG	OK	6
			NG	7
NG	OK	OK	OK	8
			NG	9
		NG	OK	A
			NG	b
	NG	OK	OK	C
			NG	d
		NG	OK	E
			NG	F

Fig. 1-5



Mechanism position	EJECT		CASSETTE DOWN		STOP		REV		PLAY/CUE/ SLOW/STILL		BRAKE		FF/REW
position code	1	2	3	4	5	6	7	8	9	A	B	C	D

3. When 1 to 4 listed in Lock code occurs, Lock data will be stored in the Memory IC (latest Lock data only).

Note:

1. Lock data will be kept after the AC Cord is unplugged.

2. When 1 to 4 listed in Lock code occurs for the first time, the VCR does not go into VCR shut-off condition. If it occurs again within a minute, the VCR goes into VCR shut-off condition. Then, the VCR stops and all VCR function buttons exceptfor power become non-operational.

3. Lock data will be cleared at the first power on operation after Lock code is displayed in FIP.

4.1.2. USAGE SCREEN MODE

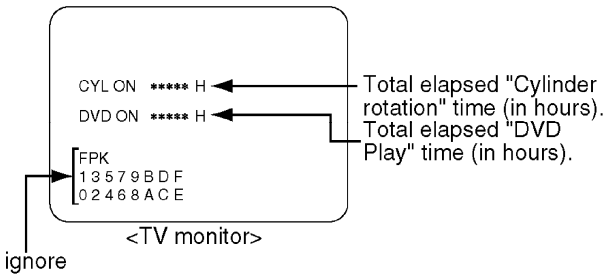
This function is displayed on the TV monitor:

- the total elapsed "Cylinder rotation" time (in hours)

- the total elapsed "DVD Play" time (in hours)

1. With power turned and no cassette, press CH DOWN button on VCR and 7 key on remote together.
(The USAGE SCREEN will be displayed on the TV Monitor.)

Fig. 2



Note:

1. After replacing the Cylinder Unit, press COUNTER RESET button on remote in this mode. Only Total elapsed "Cylinder rotation" time (in hours) will be cleared to 0.

2. To release from Usage Screen Mode, press any operation button on VCR or insert a cassette tape in this mode. The VCR will return to normal operation mode.

4.1.3. EEPROM IC (IC6005), MAIN C.B.A. REPLACEMENT NOTE

After replacing EEPROM IC (IC6005) or Main C.B.A., be sure to perform the "PG SHIFTER ADJUSTMENT" in ELECTRICAL ADJUSTMENT procedures.

4.1.4. GROUNDING FOR ELECTROSTATIC BREAKDOWN

Prevention

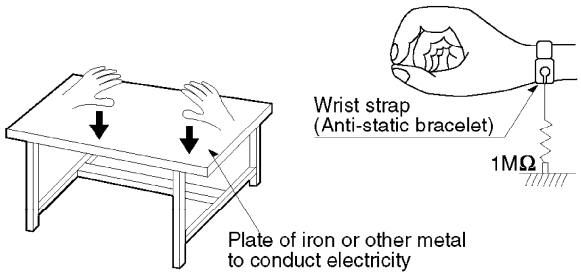
1. Human body grounding
Use the antistatic wrist strap to discharge the static electricity from your body.

2. Work table grounding
Put a conductive material (sheet) or steel sheet on the area where the optical pickup is placed and ground the sheet.

Caution:

The static electricity of your clothes will not be grounded through the wrist strap. So take care not to let your clothes touch the optical pickup.

Fig. 3



4.1.5. DVD UNIT REPLACEMENT NOTE

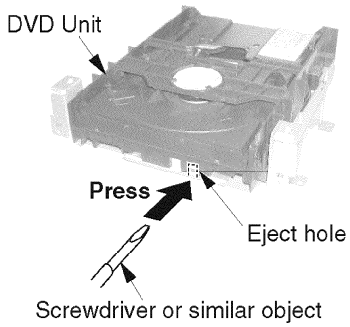
After replacing the DVD Unit, the DVD Main C.B.A. or EEPROM IC (IC8002), confirm the Firmware version of DVD. If the version is different than that indicated on the Firmware Disc, update it using the Firmware Disc. Refer to "HOW TO UPDATE THE FIRMWAREOF DVD."

4.1.6. METHOD FOR EJECTING THE DVD TRAY MANUALLY

1. Insert a Screwdriver or similar object into the Eject hole.

2. Press it gently, and then pull the Tray fully out.

Fig. 4



4.1.7. HOW TO UPDATE THE FIRMWARE OF DVD

It is possible to update the firmware version of the DVD using Firmware Disc for DVD.

Note:

If, after approx. 30 seconds, a unit set to DVD mode automatically switches to VCR mode, there is likely a problem with the DVD Main C.B.A. (IC8001, IC8201, IC8204, etc.)

How to confirm the firmware of DVD:

1. Connect a TV Monitor.

2. Insert a DVD disc into the DVD Unit.

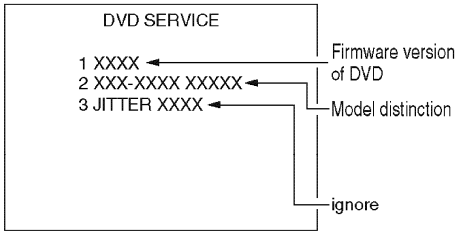
3. Set the unit to DVD mode. Then, press STOP button to stop playback.

Note:

Do not let a DVD play during DVD Service Menu.

4. Press and hold STOP button on the VCR and 9 key on the remote together with no cassette inserted. The unit will enter the DVD Service Menu.

Fig. 5



5. After comfirmation, remove a Disc from the Tray and press POWER OFF to end this menu.

How to update the firmware of DVD:

1. Turn on the power.

2. Set the unit to DVD mode.

3. Press OPEN/CLOSE button to open the tray. Then, place the Firmware Disc for DVD in the tray.

4. Close the tray. Updating will begin automatically.

5. After approx. 1 minute, the tray will open automatically.

Note:

If the tray has still not opened after 3 minutes, updating was unsuccessful. In this case, repeat above steps from step 1.

6. Remove the Firmware Disc from the tray. Then, disconnect the AC Plug. (The tray will not close.)

7. Connect the AC Plug and turn on the power. Then, reset all VCR memory. Refer to "HOW TO RESET ALL VCR MEMORY FUNCTIONS."

CAUTION:

1. Do not unplug the AC Cord during updating.

2. Do not press any buttons during updating.

4.1.8. SERVICE POSITION

4.1.8.1. Service Position

Service Position	Purpose
Service Position (1)	Mechanism check Mechanical adjustment Electrical adjustment
Service Position (2)	Main C.B.A. check
Service Position (3)	DVD Main C.B.A. check

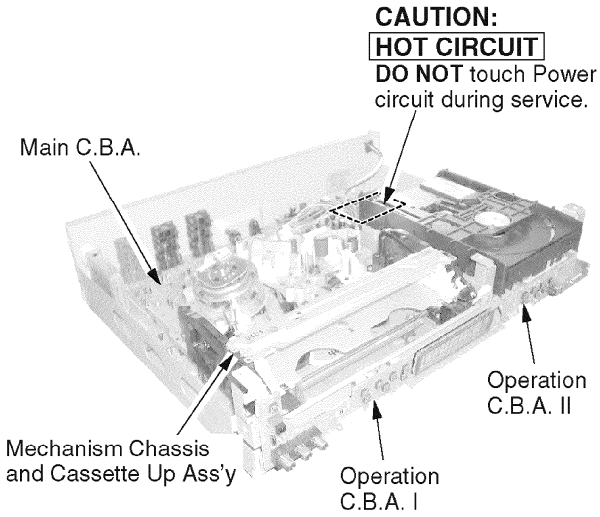
CAUTION:

HOT CIRCUIT (Primary circuit) exists on the Main C.B.A.

Use extreme care to prevent accidental shock when servicing.

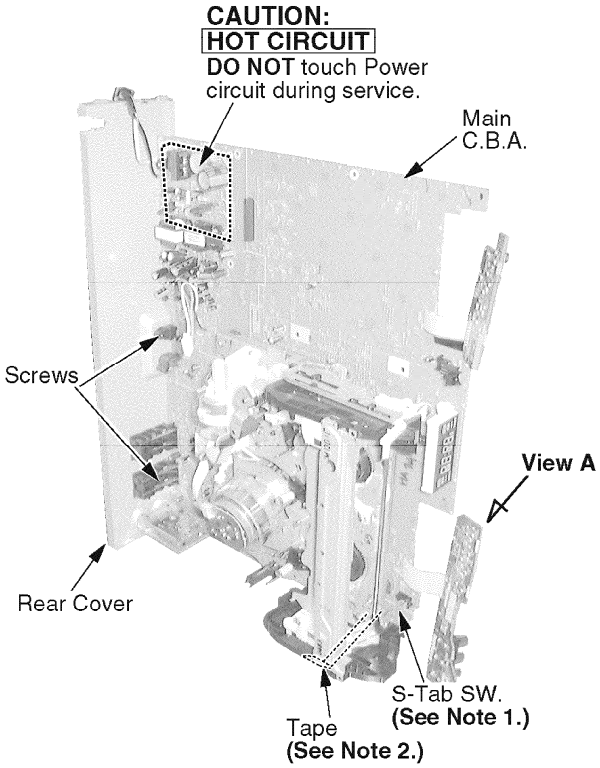
4.1.8.1.1. Service Position (1)

Fig. 7-1



4.1.8.1.2. Service Position (2)

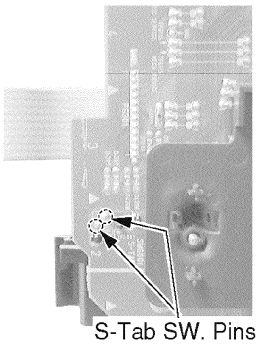
Fig. 7-2-1



Note:

1. It is possible that the S-Tab SW. may not work correctly in Service Position (2). (Recording can not be done). In this case, short the S-Tab SW. Pins on the foil side of the Main C.B.A. to turn this SW. on.

Fig. 7-2-2



Main C.B.A. (foil side)
View A

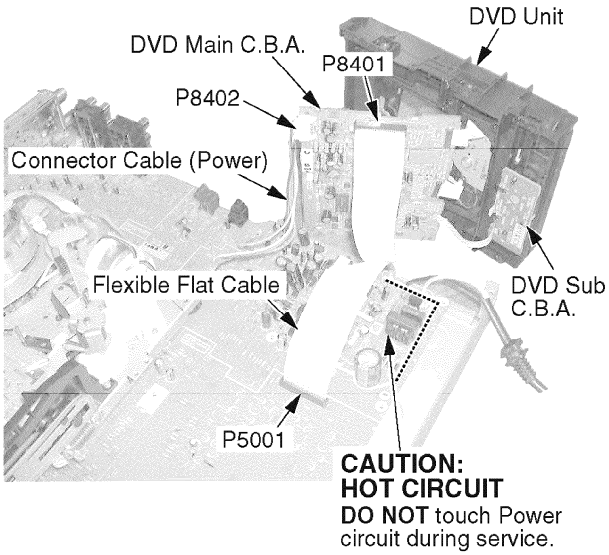
Alternative method:
Cover the S-Tab SW. with masking tape.

2. Place the tape between the Cassette Up Ass'y and Main C.B.A. to get a stability.

4.1.8.1.3. Service Position (3)

In Service Position (3), the DVD Main C.B.A. without Extension Cables can be performed.
Turn on the power and play back the Cassette tape.

Fig. 13



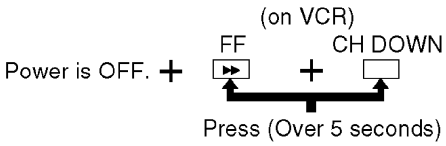
4.1.9. HOT CIRCUIT

Primary circuit exists on the Main C.B.A.
This circuit is identified as "HOT" on the C.B.A. and in the Service Manual. Use extreme care to prevent accidental shock when servicing.

4.1.10. SERVICE MODE

In order to inhibit detection of the Supply & Takeup Photo Transistors, Reel Sensor, and Cylinder Lock, press and hold FF button and CH DOWN buttons on VCR together over 5 seconds in power off condition.

Fig. 8-1

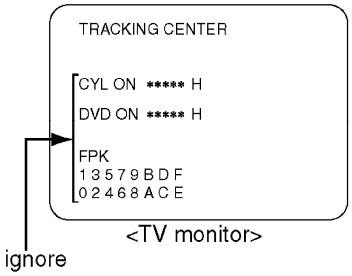


The power comes on and the unit goes into service mode.
In this mode, Mechanism movement can be confirmed. When removing Cassette Up Ass'y, it can be confirmed without a cassette.
To release from this mode, press POWER button off or disconnect AC Plug.

4.1.11. TRACKING CENTER MODE (TRACKING FIX AT CENTER)

Insert the Cassette tape. Set the unit into Service Mode. Turn on the power and play back the Cassette tape. Press PLAY button in Play back mode. "TRACKING CENTER" will be displayed on the TV monitor.
In this mode, the tracking is fixed at center. (Auto tracking and manual tracking functions are not operational.)

Fig. 8-2



To release from this mode, press PLAY or STOP button.

4.1.12. CAUTION FOR INSTALLATION OF FRONT PANEL ASS'Y

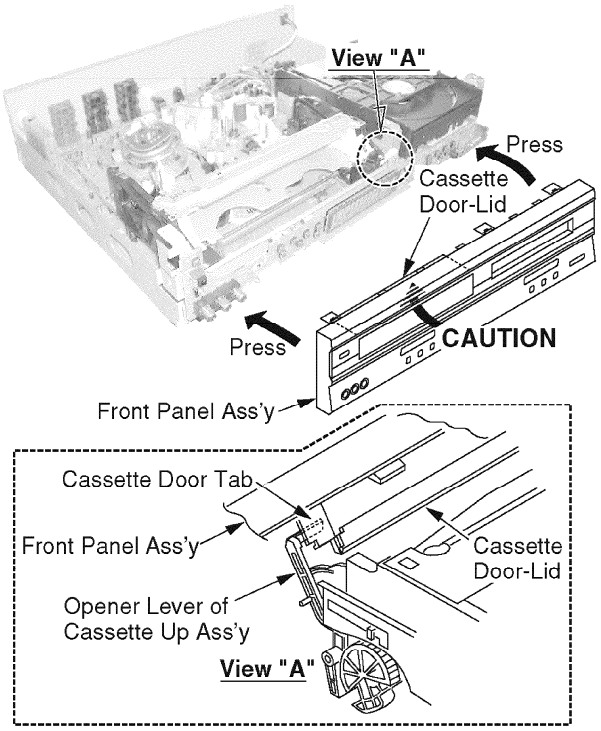
CAUTION:

Opener Lever may be damaged when Front Panel Ass'y is installed, with Cassette Door-Lid of Front Panel Ass'y and Opener Lever of Cassette Up Ass'y set incorrectly.

Install the Front Panel Ass'y as follows:

1. **Swing the Cassette Door-Lid all the way open until the Cassette Door tab clears the Opener Lever.**
2. **Make sure that all locking tabs are aligned properly. Then, press the Front Panel straight in.**

Fig. 9



4.1.13. METHOD FOR LOADING/UNLOADING OF MECHANISM

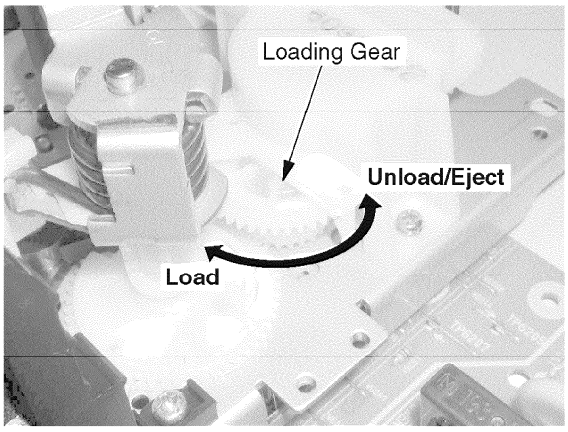
4.1.13.1. (Manual Method)

Turn the Loading Gear clockwise (for loading) or counterclockwise (for unloading) using needlenose pliers etc.

Note:

Do not use this method if Mechanism is jammed or locked.

Fig. 10-1



4.1.13.2. (Electrical Method)

Apply +10.0 V DC Power Supply to the Loading Motor terminals.

Loading

DC + to Portion "a," DC - to Portion "b"

Unloading

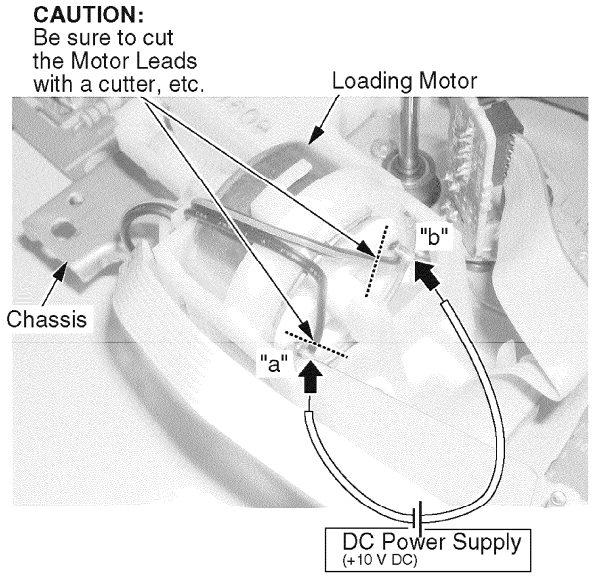
DC - to Portion "a," DC + to Portion "b"

CAUTION:

Before applying DC Power Supply, be sure to cut the Motor Leads with a cutter, etc.

Otherwise, the Loading Motor Drive IC (IC2501) may be damaged.

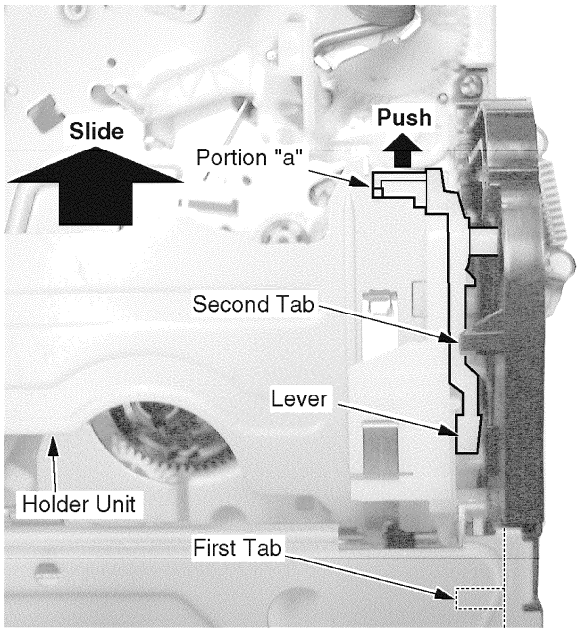
Fig. 10-2



4.1.13.2.1. WHEN LOADING WITHOUT A CASSETTE

When loading without a cassette, push Portion "a" on the Holder Unit of Cassette Up Ass'y so that the Lever clear the First Tab and Second Tab.

Fig. 10-3



4.1.14. HOW TO REMOVE A JAMMED TAPE

CAUTION:

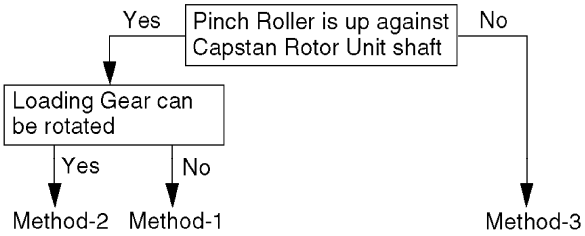
Wiper Arm Unit may be damaged or its spring may be out of place when the jammed tape is removed by force.

Remove a jammed tape as follows:

4.1.14.1. Manual Method

When a tape jam is encountered, check the tape loading condition and use the following procedure to remove a tape jam.

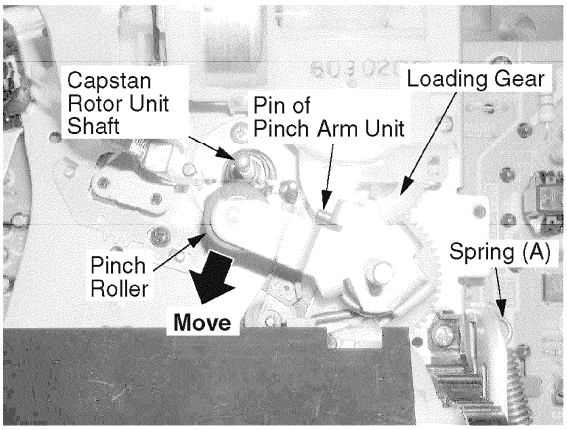
Fig. 11-1



Method -1:

1. **Move the Pinch Roller Unit out by unhooking the Pin of Pinch Arm Unit so that the Pinch Roller is separated from the Capstan Rotor Unit shaft.**

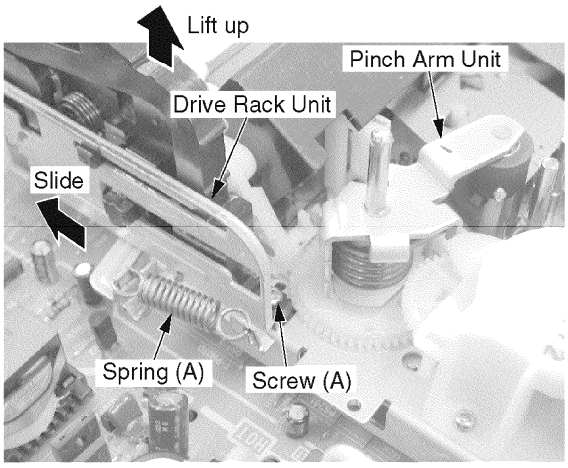
Fig. 11-2



Top View

2. **Remove the tape from the tape path.**
3. **Rewind the tape into the cassette by rotating the Center Clutch Unit counterclockwise.**
4. **Unhook Spring (A) of the Drive Rack Arm.**
5. **Remove Screw (A).**
6. **Lift the Cassette Up Ass'y. While pulling the Cassette Up Ass'y out far enough so that it clears the Drive Rack Arm, slide the Drive Rack Unit as indicated by the arrow to remove the cassette tape from the Cassette Up Ass'y.**
7. **Check the cause of mechanical trouble and repair.**

Fig. 11-3



Method -2:

1. **Rotate Loading Motor counterclockwise with needlenose pliers, etc. so that the Pinch Roller is separated from the shaft of the Capstan Rotor Unit.**
2. **Perform Step 2 through Step 7 of Method -1.**

Method -3:

1. **Perform Step 2 through Step 7 of Method -1.**

Note:

After repairing mechanical trouble, make sure that all gear alignments are correct, especially the Wiper Arm Unit and Drive Rack Unit of Cassette Up Ass'y. (Refer to "EJECT Position Confirmation"in DISASSEMBLY/ASSEMBLY PROCEDURES.)

4.1.14.2. Electrical Method

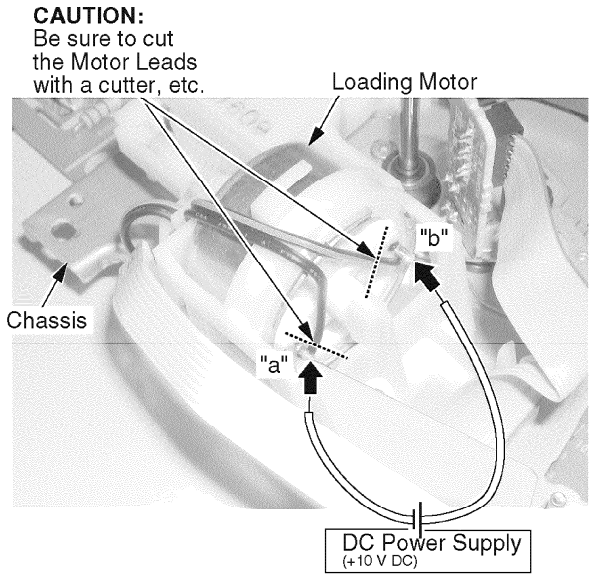
Electrical method can only be performed when the mechanism is moved by rotating the Loading Gear.

CAUTION:

1. **Before applying DC Power Supply, be sure to cut the Motor Leads with a cutter, etc.**
   Otherwise, the Loading Motor Drive IC (IC2501) may be damaged.
2. **If loading does not start in approx. 2 seconds after DC Power Supply is applied, DO NOT continue to apply DC Power Supply. Instead, perform "Manual Method."**

1. **Be sure to cut the Motor Leads with a cutter, etc.**
2. **Apply +10.0 V DC Power Supply to the Loading Motor terminals.**
3. **When the Loading Posts reach the fully unloaded position, remove the Power Supply.**

Fig. 12



4. Rewind the tape into the cassette by turning the Center Clutch Unit counterclockwise.

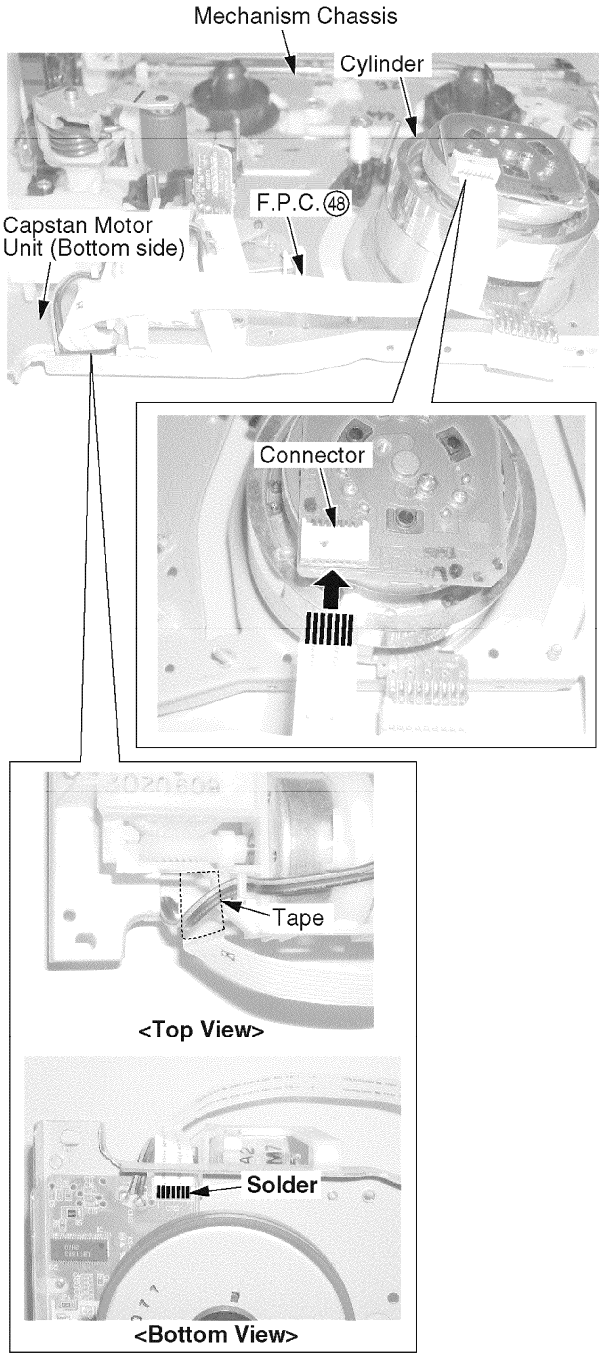
5. Eject the cassette by applying +10.0 V DC Power Supply again.

4.1.15. F.P.C. CONNECTION NOTE

4.1.15.1. F.P.C. between the Capstan Motor and the Cylinder

Be careful with the direction of F.P.C. to connector as shown.

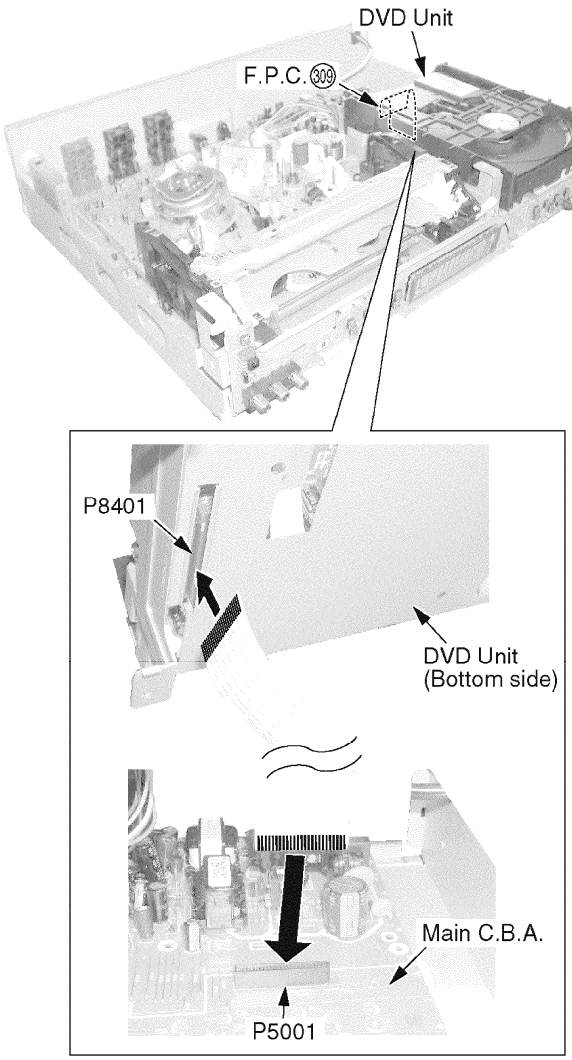
Fig. 13



4.1.15.2. F.P.C. between the DVD Unit (DVD Main C.B.A.) and the Main C.B.A.

Be careful with the direction of F.P.C. to connector as shown.

Fig. 14



4.1.16. BLACK SCREWS ON THE CHASSIS

Black Screws are used on the Mechanism Chassis to identify screws that require adjustment.

4.1.17. HOW TO RESET ALL MEMORY FUNCTIONS

To reset (clear) the select language, channel auto set and set clock functions to their initial power on condition (power on, no cassette inserted), hold down the PLAY and CH UP buttons on the unit together for more than 5 seconds.
Power will shut off.

4.1.18. HOW TO CONFIRM AUTO CLOCK SET FEATURE

1. **Connect an RF cable from the output of one unit to the input of the test unit.**
2. **Select corresponding RF channels.**
3. **Playback a recording of P.B.S. channel including clock set data and confirm this feature.**

4.1.19. VARIABLE VOLTAGE ISOLATION TRANSFORMER

An Isolation Transformer should always be used during the servicing of DVD VCR whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the

technician from accidents resulting in personal injuryfrom electrical shocks. It will also protect DVD VCR from being damaged by accidental shorting that may occur during servicing.
Also, when troubleshooting the above type of Power Supply Circuit, a variable isolation transformer is required in order to increase the input voltage slowly.

4.1.20. SPECIAL NOTE

All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.

4.1.21. MODEL NO. IDENTIFICATION MARK

Use Marks shown in the chart below to distinguish the different models included in this Service Manual.

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT

Note:
Refer to Item 3 of Schematic Diagram Notes of Schematic Diagram and Circuit Board Layout Notes, for mark "PT."

5. DISASSEMBLY/ASSEMBLY PROCEDURES

5.1. CABINET SECTION

5.1.1. Disassembly Flowchart

Perform all disassembly procedures in the order described in the "Disassembly Flowchart" shown below. When reassembling, use the reverse procedure.

CAUTION:

Disconnect AC plug before disassembly.

Fig. D1

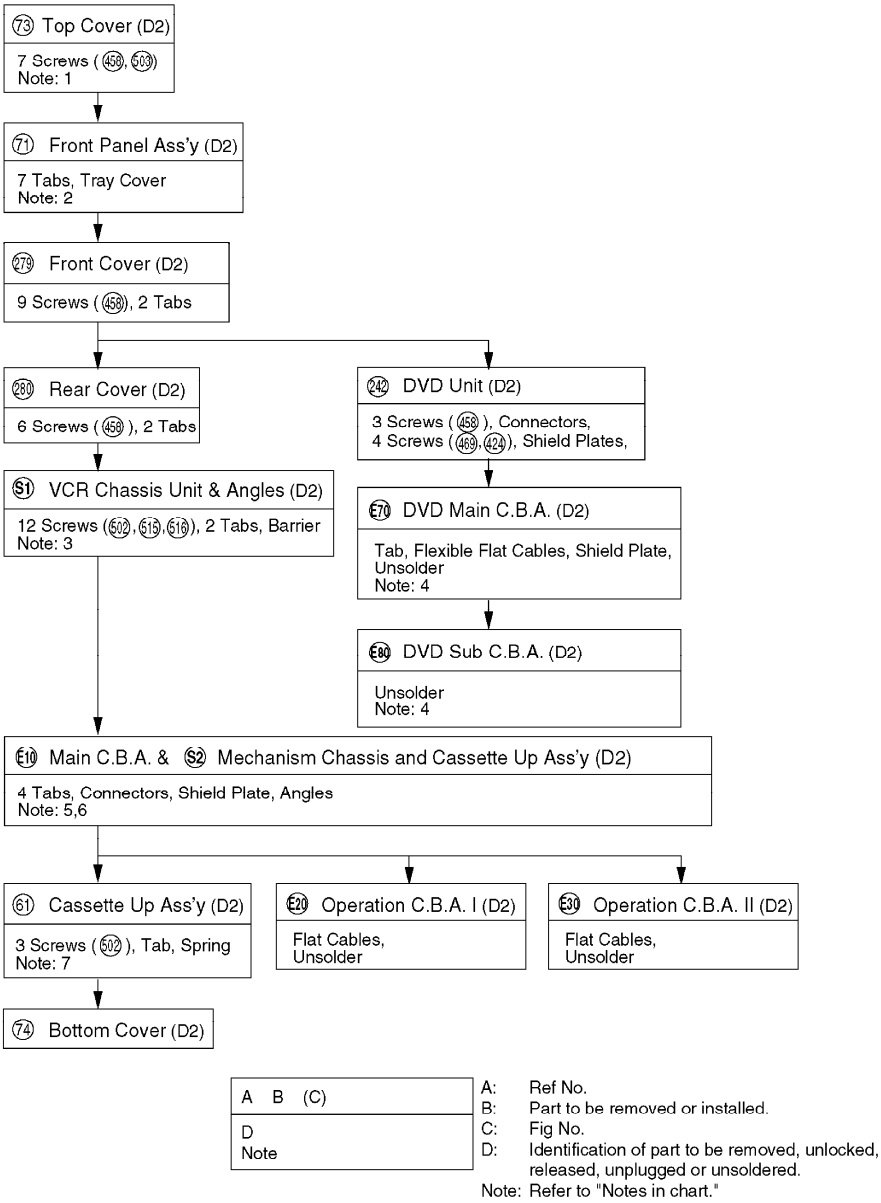
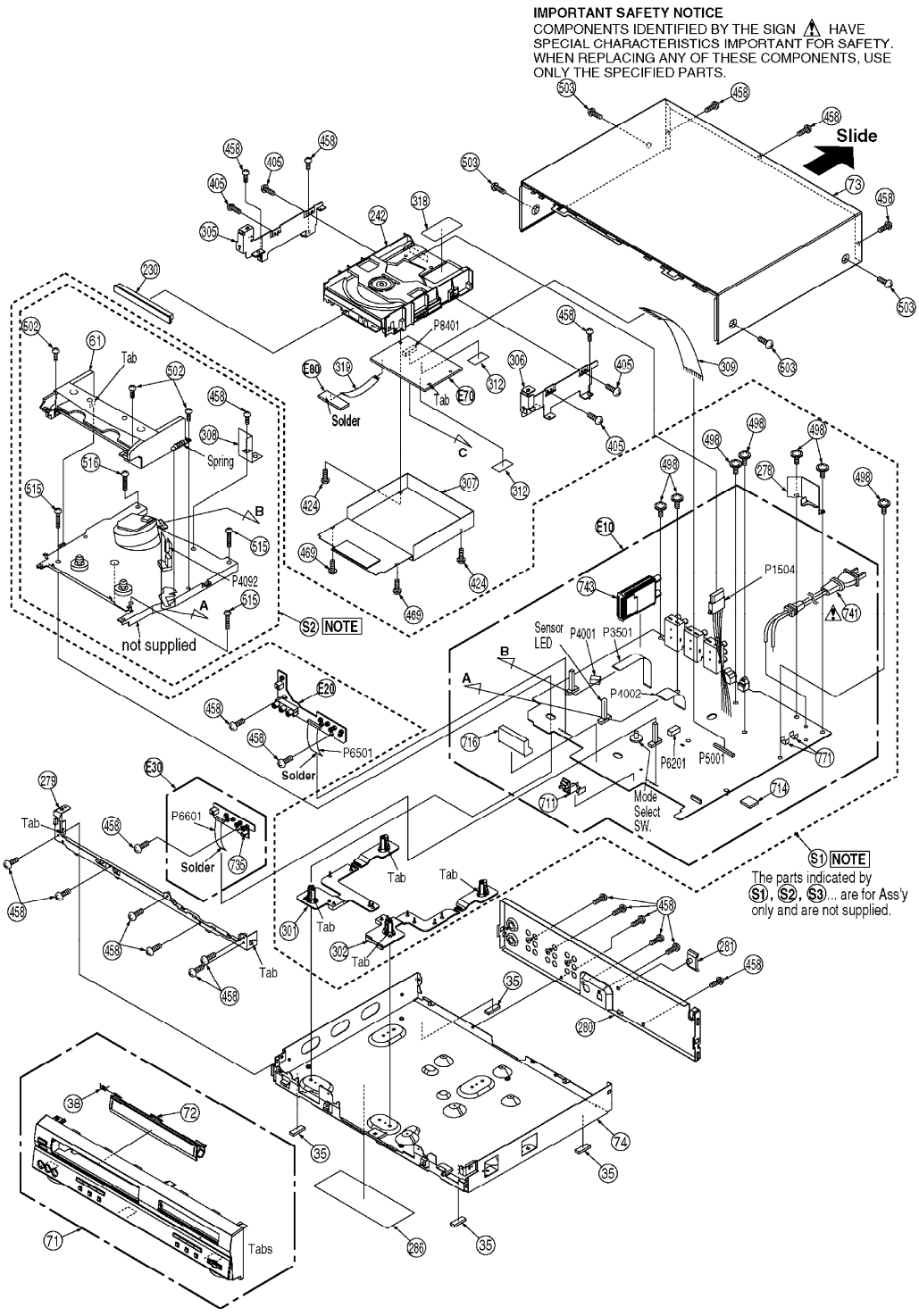

73 Top Cover (D2)
7 Screws (459, 503)
Note: 1
71 Front Panel Ass'y (D2)
7 Tabs, Tray Cover
Note: 2
279 Front Cover (D2)
9 Screws (458), 2 Tabs
280 Rear Cover (D2)
6 Screws (458), 2 Tabs
242 DVD Unit (D2)
3 Screws (458), Connectors,
4 Screws (469, 424), Shield Plates,
S1 VCR Chassis Unit & Angles (D2)
12 Screws (502, 515, 516), 2 Tabs, Barrier
Note: 3
E70 DVD Main C.B.A. (D2)
Tab, Flexible Flat Cables, Shield Plate,
Unsolder
Note: 4
E80 DVD Sub C.B.A. (D2)
Unsolder
Note: 4
E10 Main C.B.A. & S2 Mechanism Chassis and Cassette Up Ass'y (D2)
4 Tabs, Connectors, Shield Plate, Angles
Note: 5,6
61 Cassette Up Ass'y (D2)
3 Screws (502), Tab, Spring
Note: 7
E20 Operation C.B.A. I (D2)
Flat Cables,
Unsolder
E30 Operation C.B.A. II (D2)
Flat Cables,
Unsolder
74 Bottom Cover (D2)
A B (C)
D
Note
A: Ref No.
B: Part to be removed or installed.
C: Fig No.
D: Identification of part to be removed, unlocked, released, unplugged or unsoldered.
Note: Refer to "Notes in chart."

Fig. D2



5.1.1.1. Notes in chart

1. Removal of Top Cover

When removing the Top Cover, slide it as indicated by the arrow.

2. Removal of Front Panel Ass'y

A. Before removing the Front Panel Ass'y, remove the Tray Cover first. To do, open the tray with the unit powered on. Then, close the tray

and unplugged AC Plug.

Installation of Front Panel Ass'y

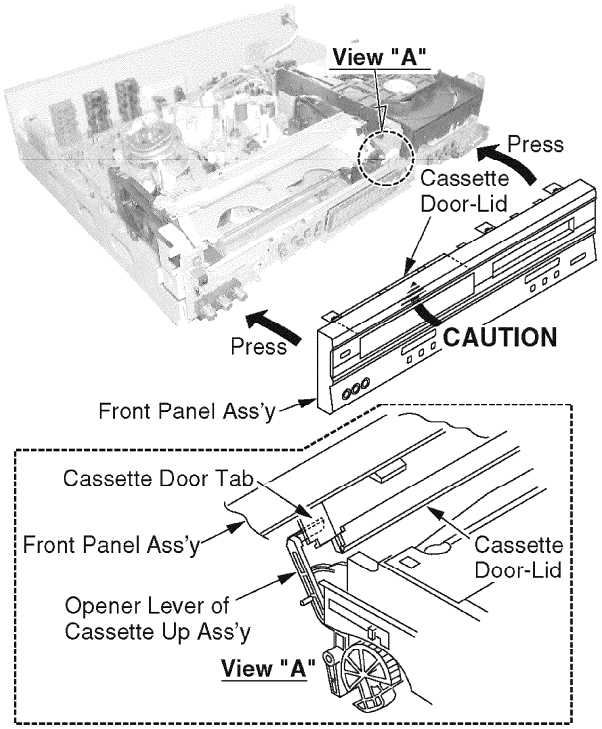
CAUTION:

Opener Lever may be damaged when Front Panel Ass'y is installed, with Cassette Door-Lid of Front Panel Ass'y and Opener Lever of Cassette Up Ass'y set incorrectly.

A. When installing the Front Panel Ass'y, swing the Cassette Door-Lid all the way open until the Cassette Door tab clears the Opener Lever.

B. Make sure that all locking tabs are aligned properly. Then, press the Front Panel straight in.

Fig. D3



3. Installation of VCR Chassis Unit

When installing 2 Screws (515), slide the Holder Unit of the Cassette Up Ass'y (Refer to "WHEN LOADING WITHOUT A CASSETTE" in Service Notes) to tighten screws. Then, slide it back to the EJECT Position.

4. Removal of DVD Sub C.B.A.

A. Remove solder portions "a," "b," and "c" on the DVD Sub C.B.A.

B. Remove the DVD Sub C.B.A. while releasing the Locking Tab.

Installation of DVD Main C.B.A. and DVD Sub C.B.A.

A. Confirm that the Lever A is positioned as shown, and install the DVD Sub C.B.A. with the Locking Tab and 2 bosses.

B. Install the DVD Main C.B.A. with the Locking Tab and the rib.

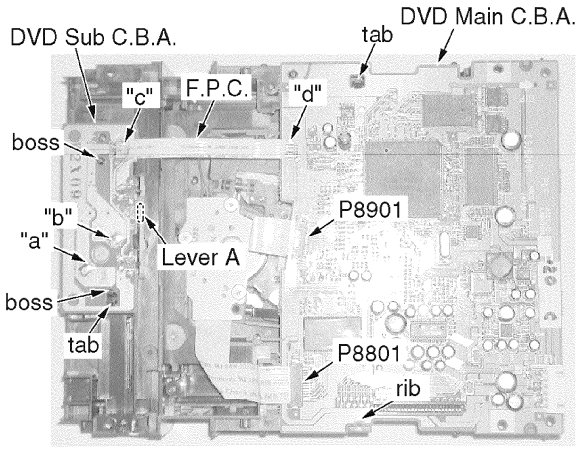
C. Solder portions "a," "b," "c" and "d" on the DVD Sub C.B.A.

Note:

Solder portions "a" and "b" while pushing down the DVD Sub C.B.A. securely at below 330 C for less than 3 seconds.

D. Connect the F.P.C.s to Connectors P8901, P8801 on the DVD Main C.B.A.

Fig. D4

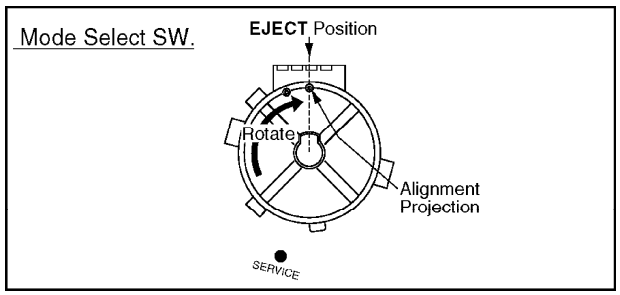


<Bottom View>

5. Installation of Mechanism Chassis and Cassette Up Ass'y onto Main C.B.A.

A. Make sure the Mode Select SW. on the Main C.B.A. is in EJECT position. If not, rotate the Mode Select SW. until the alignment projection is in the EJECT Position.

Fig. D5

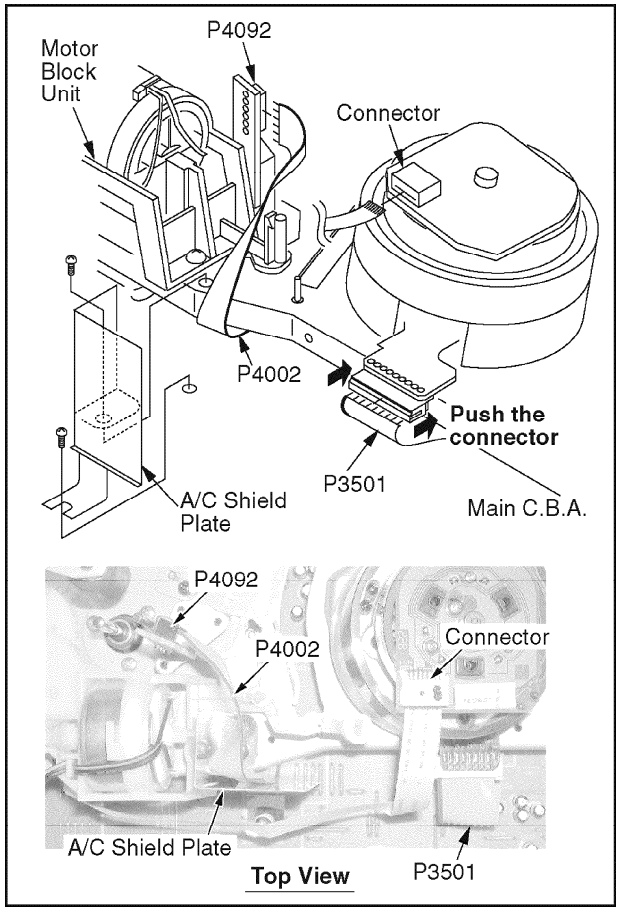


B. Install the Mechanism Chassis and Cassette Up Ass'y straight onto the Main C.B.A. so that the Sensor LED clears the hole in the Mechanism Chassis and that 2 Connectors (P4001, P6201) are aligned and seated securely.

6. Connection of Mechanism Chassis

Connect the Flat Cables. Then, install the A/C Shield Plate as shown.

Fig. D6



7. Installation of Cassette Up Ass'y

A. Confirm that the Locking Tab under the Cassette Up Ass'y is in Hole on the Mechanism Chassis when installing the Cassette Up Ass'y. Then, slide the Cassette Up Ass'y towards the back.

B. When installing 2 Screws (502), slide the Holder Unit (Refer to "WHEN LOADING WITHOUT A CASSETTE" in Service Notes) to tighten screws. Then, slide it back to the EJECT Position.

C. Hook Spring to the Drive Rack Arm on the Mechanism Chassis.

5.2. MECHANISM SECTION

5.2.1. Disassembly/Reassembly Method

This procedure starts with the condition that the cabinet parts and Main C.B.A. have been removed.
When reassembling, perform the step(s) in the reverse order.
Perform all disassembly/reassembly and alignments procedures in EJECT Position.

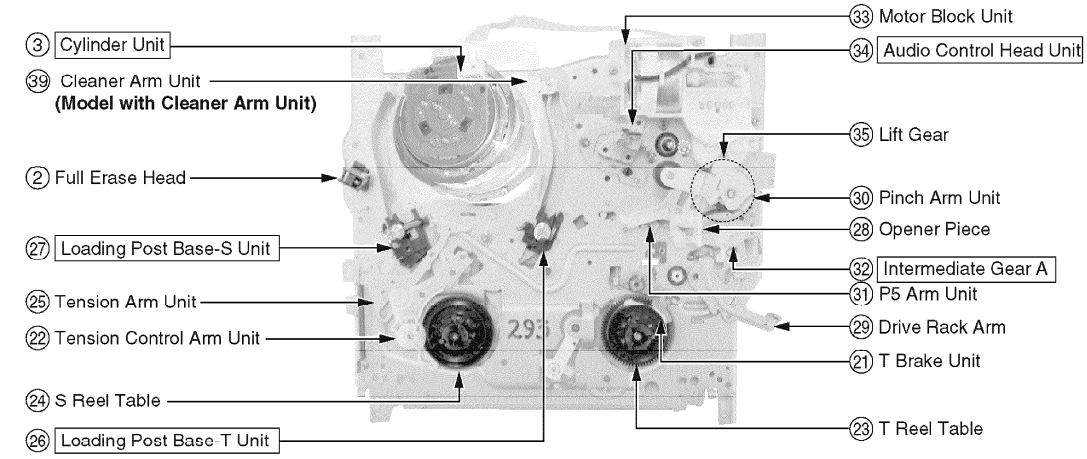
Step/Loc. No.	Prior Step(s)	Part	Fig. No.	Remove	Alignment/Adjustment
①	----------	Not used	-	-	
②	----------	Full Erase Head	J2	(L-1)	
③	1	Cylinder Unit	J2	3(S-3), Flexible Cable	TAPE INTERCHANGEABILITY Adjustment
④	----------	Capstan Belt	J3-1	-	
⑤	----------	Support Angle	J3-1	(S-4), (S-5)	
⑥	5	Intermediate Gear B	J3-1	(L-2)	Gear Alignment
⑦	4,5,6	Main Cam Gear	J3-1	Main Cam Push Nut	Gear Alignment
⑧	4	Center Clutch Unit	J4-1	(W-1)	
⑨	4,8	Changing Gear Spring	J4-1	-	
⑩	4,8,9	Changing Gear	J4-1	-	
⑪	4,8,9,10	Idler Arm Unit	J4-1	-	
⑫	----------	Reel Gear	J5-1	2(L-3)	
⑬	4,5,6,7,8,9,10	Main Rod	J5-1	(W-2), (L-4)	Gear Alignment
⑭	----------	Not used	-	-	
⑮	4	Capstan Motor Unit	J6	3(S-6), Unsolder	
⑯	----------	Not used	-	-	
⑰	----------	Not used	-	-	
⑱	----------	Not used	-	-	
⑲	4,8,9,10,13	T Loading Arm Unit	J7-1	-	Gear Alignment
⑳	4,5,6,7,8,9,10,13,19	S Loading Arm Unit	J7-1	-	Gear Alignment
㉑	----------	T Brake Unit	J8-1	-	
㉒	----------	Tension Control Arm Unit	J8-1	3(L-5)	
㉓	21	T Reel Table	J8-1	-	
㉔	22	S Reel Table	J8-1	-	
㉕	22	Tension Arm Unit	J8-1	2(L-6), (P-1), (P-2)	
㉖	22,25	Loading Post Base-T Unit	J9	-	P2 AND P3 POST HEIGHT, TAPE INTERCHANGEABILITY Adjustment
㉗	22,25	Loading Post Base-S Unit	J9	-	
㉘	----------	Opener Piece	J10-1	2(L-7)	
㉙	4,5,6,7	Drive Rack Arm	J10-1	-	
㉚	28	Pinch Arm Unit	J10-1	Pinch Assit Spring	
㉛	28,30	P5 Arm Unit	J10-1	-	
㉜	5,6,28	Intermediate Gear A	J10-1	-	Gear Alignment
㉝	----------	Motor Block Unit	J11	2(S-9)	
㉞	----------	Audio Control Head Unit	J11	(S-10)	TAPE INTERCHANGEABILITY Adjustment
㉟	5,6,28,30,32,33	Lift Gear	J11	-	
㊱	----------	Not used	-	-	
㊲	22,25	Tension Arm Boss	J11	(L-8)	
㊳	----------	SS Brake Arm Unit	J5-1	(L-9), (P-3)	
㊴	----------	Cleaner Arm Unit **(Model with Cleaner Arm Unit)**	J11	(L-10)	

5.2.2. Inner Parts Location

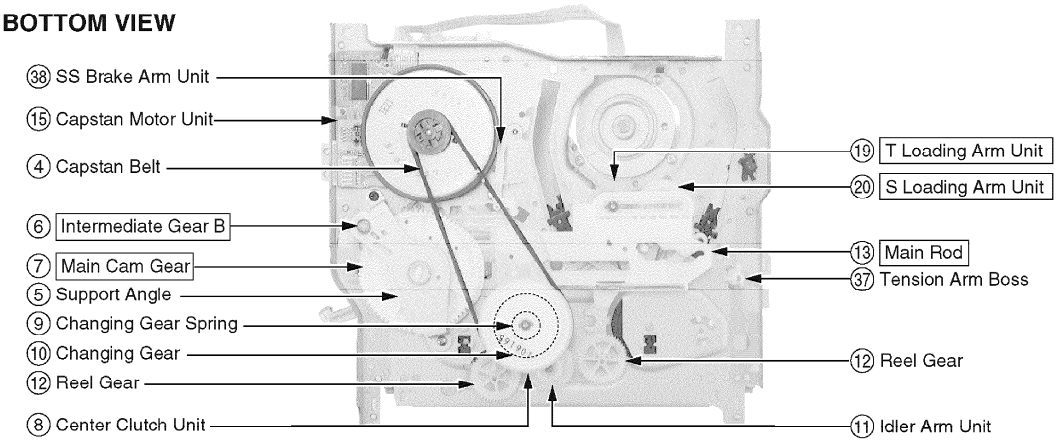
Note: BOX indicates alignment (Gear Alignment or Mechanical Adjustment) required when a part is replaced.

Fig. J1-1

TOP VIEW



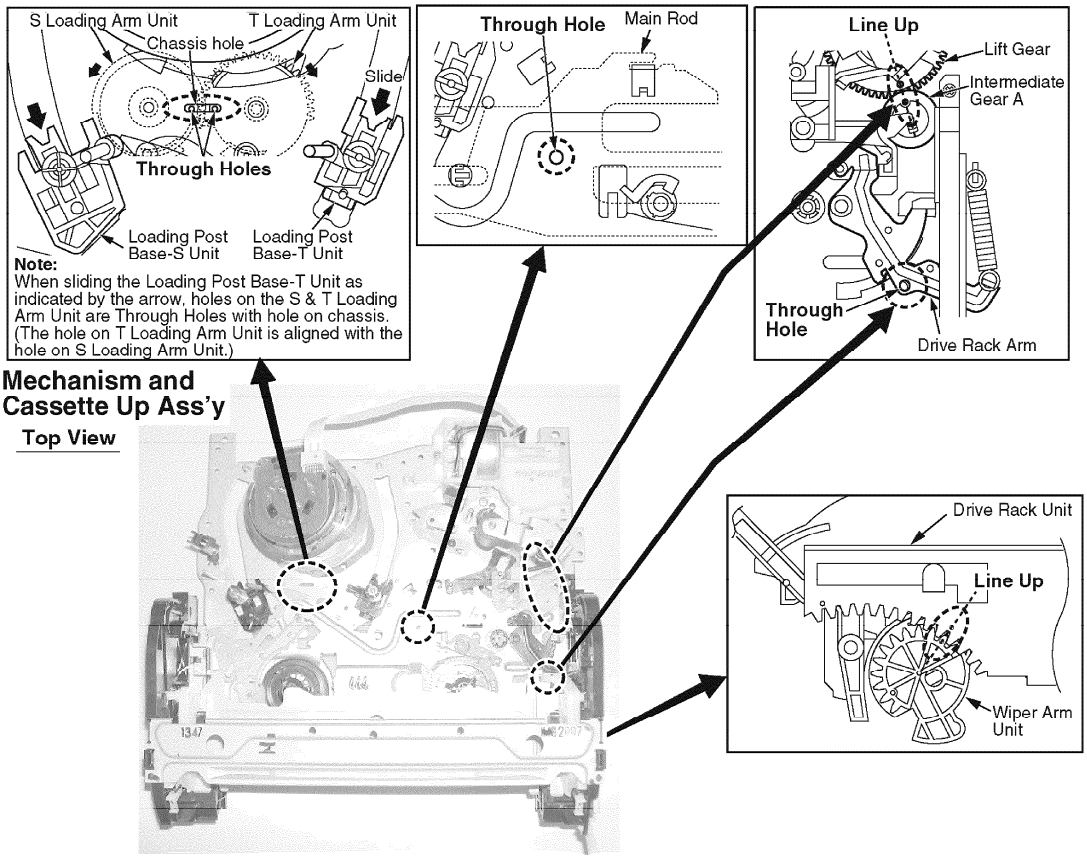
BOTTOM VIEW



5.2.3. EJECT Position Confirmation

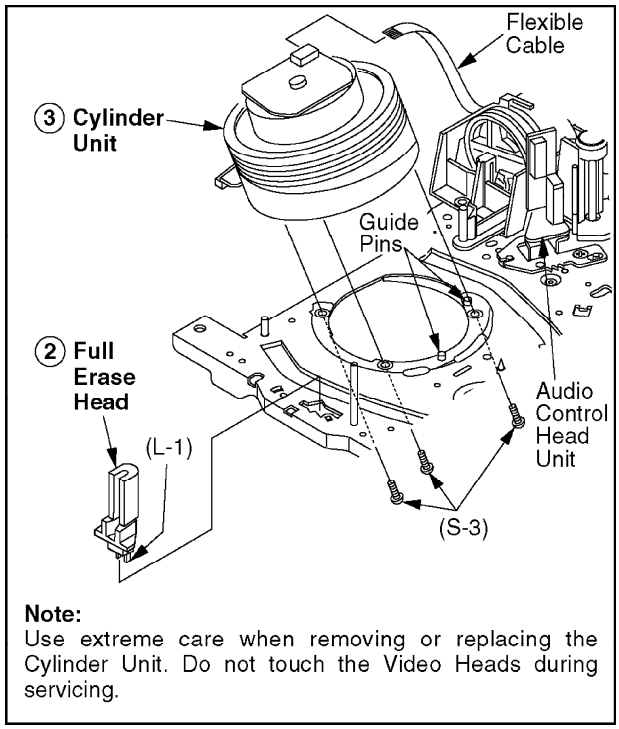
Fig. J1-2

Check the following alignment points to confirm that the Mechanism and Cassette Up Ass'y are in the **EJECT** Position from the top side.



5.2.4. Full Erase Head and Cylinder Unit

Fig. J2



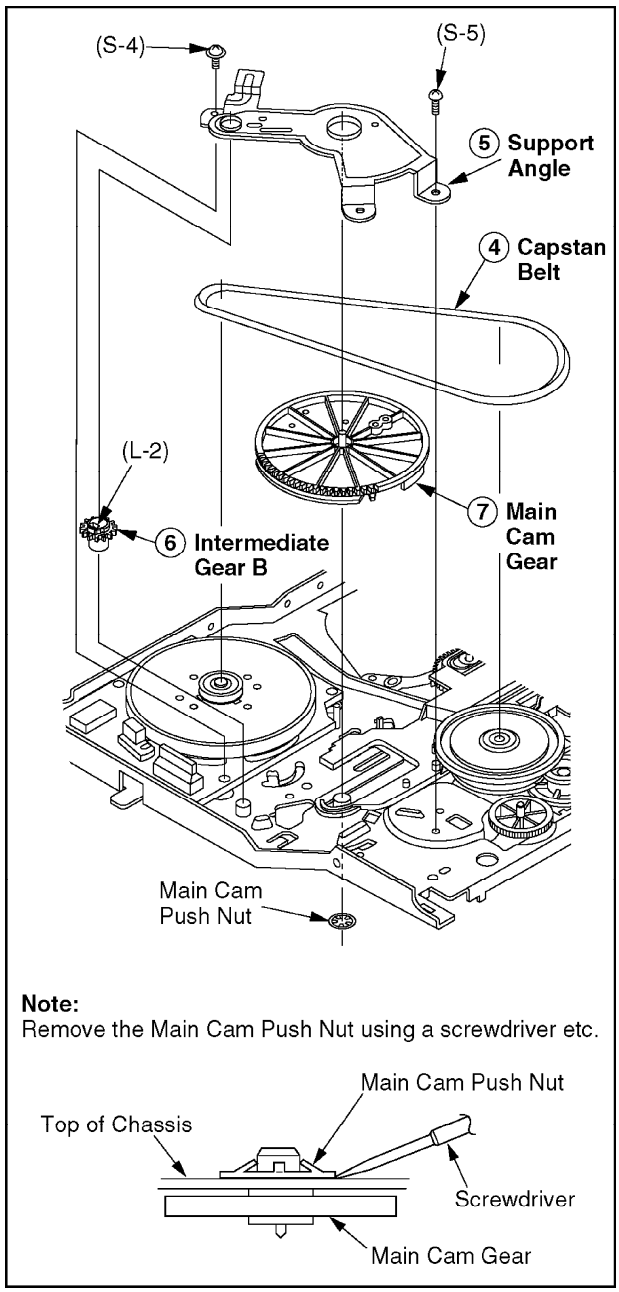
5.2.4.1. Reassembly Notes

1. After replacing the Cylinder Unit, clear the Total elapsed "Cylinder

rotation" time (in hours) to 0. Refer to "USAGE SCREEN MODE" in SERVICE NOTES.

5.2.5. Capstan Belt, Support Angle, Intermediate Gear B, and Main Cam Gear

Fig. J3-1



5.2.5.1. Reassembly Notes

1. Alignment of Main Cam Gear, Drive Rack Arm, and Main Rod

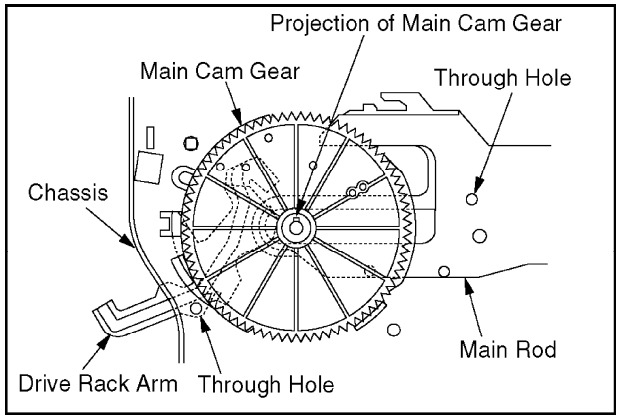
A. Confirm that the hole on Main Rod is a Through Hole with a hole on chassis.

B. Confirm that the hole on Drive Rack Arm is a Through Hole with a hole on chassis.

C. Install the Main Cam Gear so that the projection of Main Cam Gear

is in the upward position as shown.

Fig. J3-2

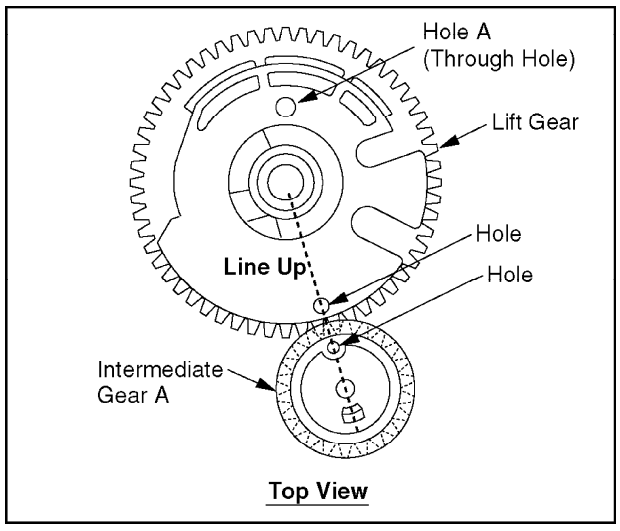


2. Confirmation/Alignment of Intermediate Gear B, Main Cam Gear, and Intermediate Gear A

A. Confirm that the Hole A on Lift Gear is a Through Hole with a hole on chassis.

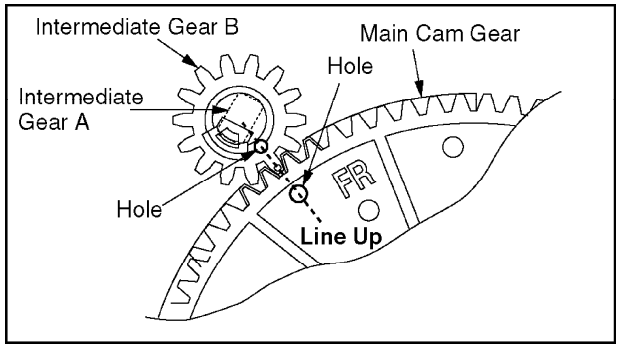
B. Confirm that the hole on Intermediate Gear A is aligned with the hole on Lift Gear.

Fig. J3-3



C. Install the Intermediate Gear B so that the hole on the Intermediate Gear B is aligned with the hole on the Main Cam Gear.

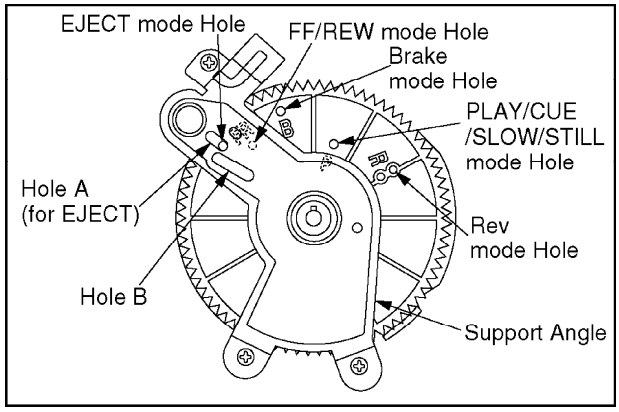
Fig. J3-4



3. Holes on Main Cam Gear

A. The EJECT mode Hole on Main Cam Gear should be a Through Hole with Hole A on Support Angle in EJECT mode. The each mode Hole on Main Cam Gear should be a Through Hole with Hole B on Support Angle in each mode.

Fig. J3-5



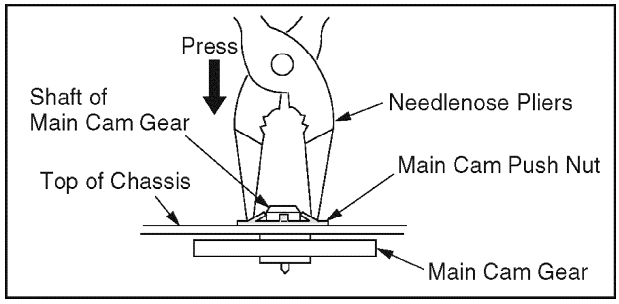
4. Main Cam Gear Kit

A. Main Cam Gear is supplied as a Main Cam Gear Kit only.
Main Cam Gear Kit consists of a Main Cam Gear and a Main Cam Push Nut.
However, Main Cam Push Nut is available separately as a replacement part.

5. Installation of Main Cam Gear and Main Cam Push Nut

A. After installing the Support Angle, install the Main Cam Push Nut with Needlenose Pliers etc. so that it is flush with the chassis. There may be some slight scratches on the Shaft of Main Cam Gear, when removing the Main Cam Gear. In case that the Main Cam Gear can be installed securely without tottering, it is fine to use the one. If any tottering, install all new parts.

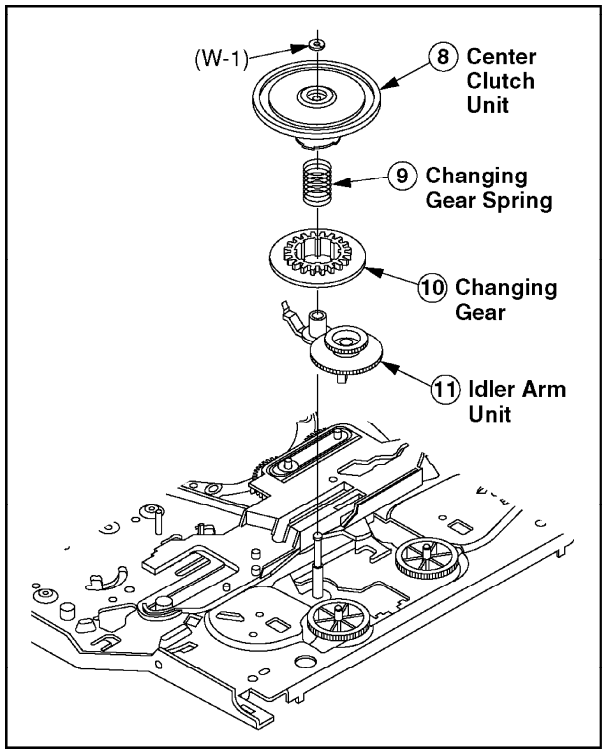
Fig. J3-6



6. The Main Cam Push Nut is not reusable. Install a new one.

5.2.6. Center Clutch Unit, Changing Gear Spring, Changing Gear, and Idler Arm Unit

Fig. J4-1

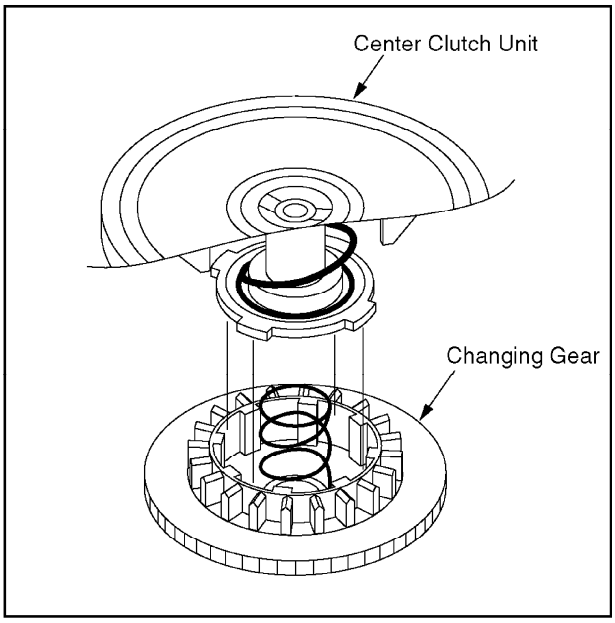


5.2.6.1. Reassembly Notes

1. Installation of Center Clutch Unit

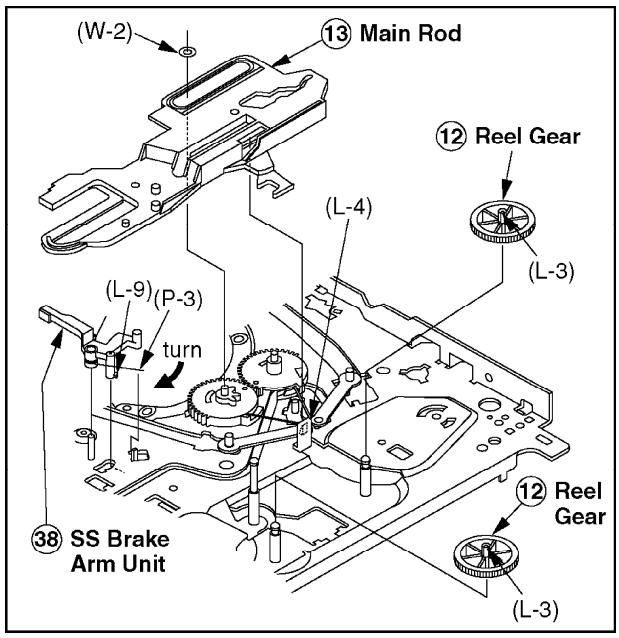
A. Fit the Center Clutch Unit into the Changing Gear.

Fig. J4-2



5.2.7. Reel Gear, Main Rod, and SS Brake Arm Unit

Fig. J5-1

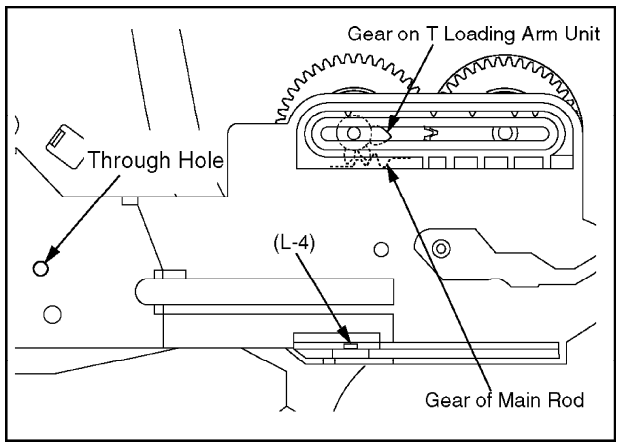


5.2.7.1. Reassembly Notes

1. Alignment of Main Rod and T Loading Arm Unit

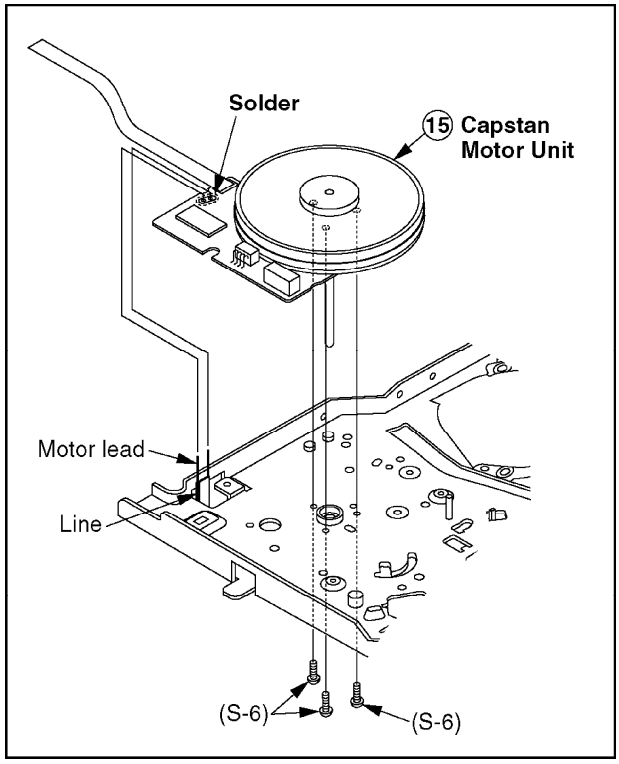
A. Align the Gear on T Loading Arm Unit with Gear of Main Rod. Confirm that the Hole on Main Rod is a Through Hole with a hole on chassis.

Fig. J5-2



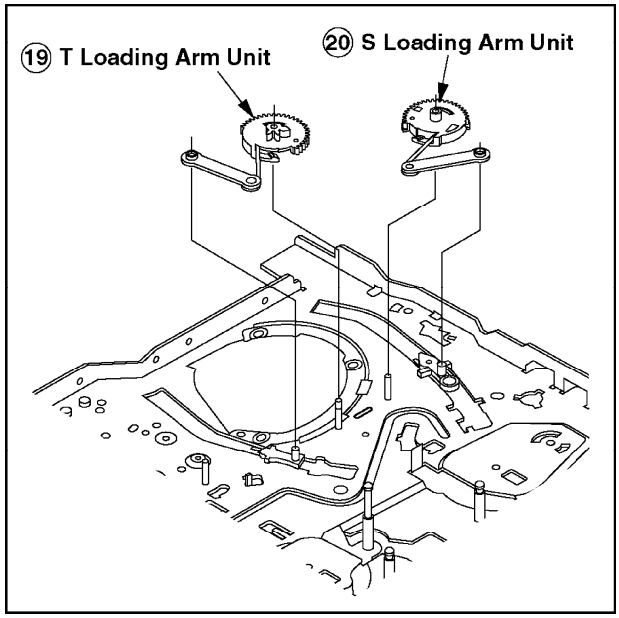
5.2.8. Capstan Motor Unit

Fig. J6



5.2.9. T Loading Arm Unit and S Loading Arm Unit

Fig. J7-1



5.2.9.1. Reassembly Notes

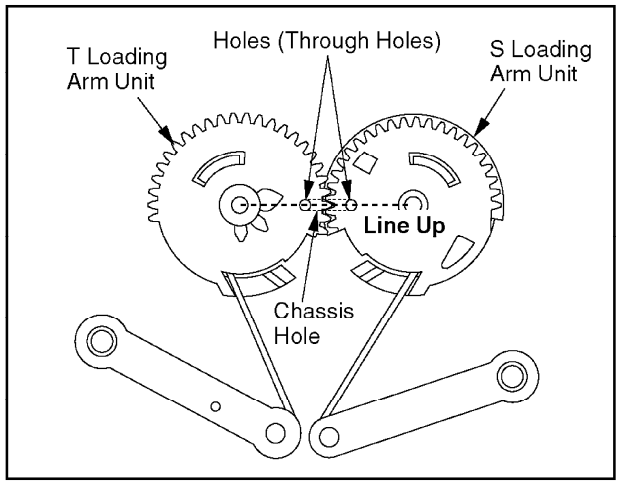
1. Alignment of T Loading Arm Unit and S Loading Arm Unit

A. Install the S Loading Arm Unit onto the chassis.

B. Install the T Loading Arm Unit so that the hole on T Loading Arm Unit is aligned with the hole on S Loading Arm Unit.

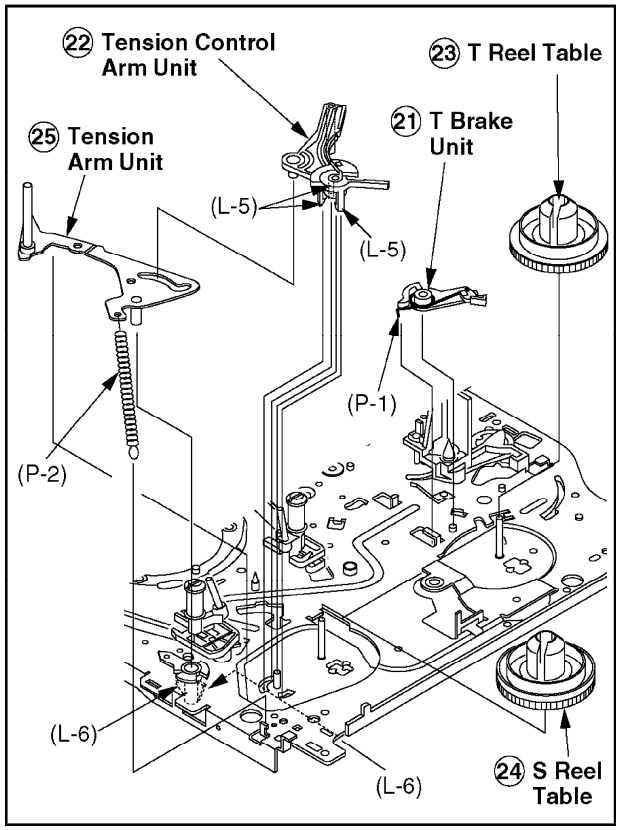
C. Confirm that the holes on the S & T Loading Arm Unit are Through Holes with hole on chassis.

Fig. J7-2



5.2.10. T Brake Unit, Tension Control Arm Unit, T Reel Table, S Reel Table, and Tension Arm Unit

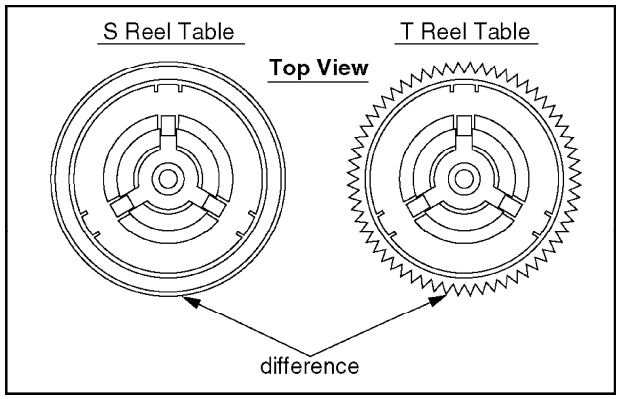
Fig. J8-1



5.2.10.1. Reassembly Notes

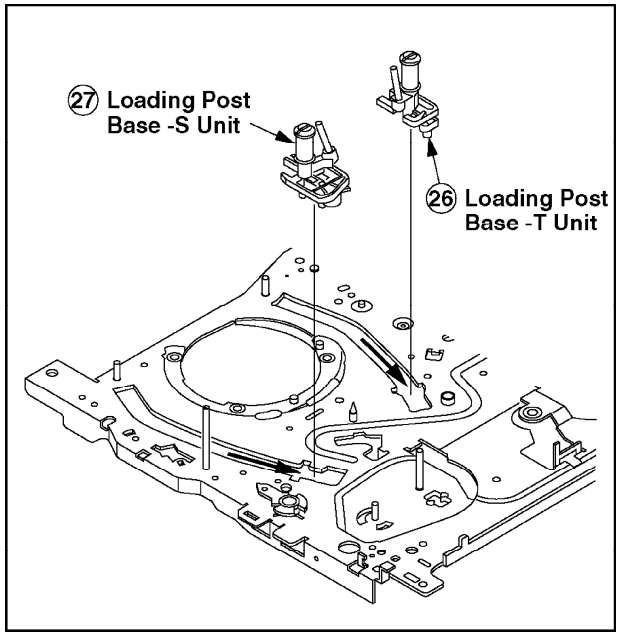
1. How to distinguish between S Reel Table and T Reel Table

Fig. J8-2



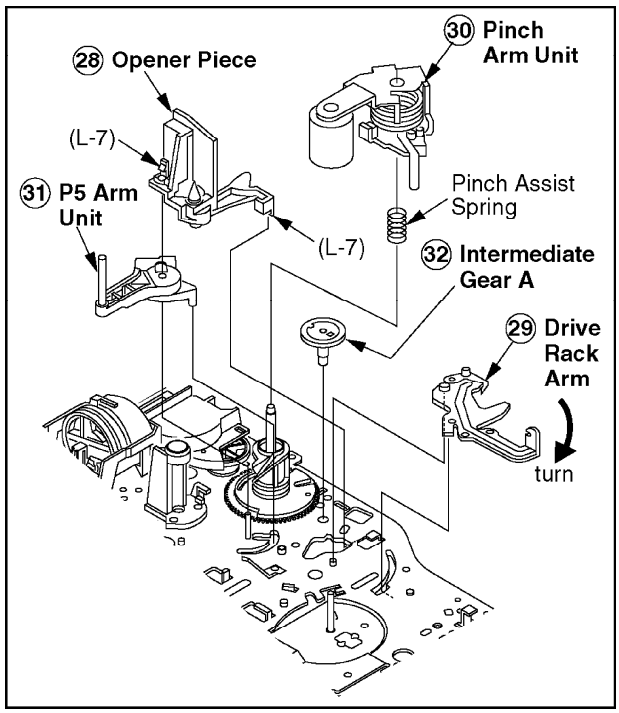
5.2.11. Loading Post Base -T Unit and Loading Post Base -S Unit

Fig. J9



5.2.12. Opener Piece, Drive Rack Arm, Pinch Arm Unit, P5 Arm Unit, and Intermediate Gear A

Fig. J10-1



5.2.12.1. Reassembly Notes

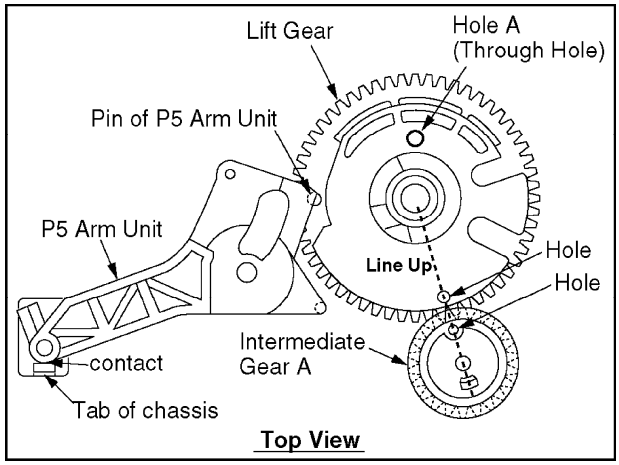
1. Installation/Alignment of Intermediate Gear A, Lift Gear and P5 Arm Unit

A. Rotate the Lift Gear so that Hole A on Lift Gear is a Through Hole with a hole on chassis.

B. Install the Intermediate Gear A so that the hole on Intermediate Gear A is aligned with the hole on Lift Gear.

C. Install the P5 Arm Unit so that it contacts with the tab of chassis.

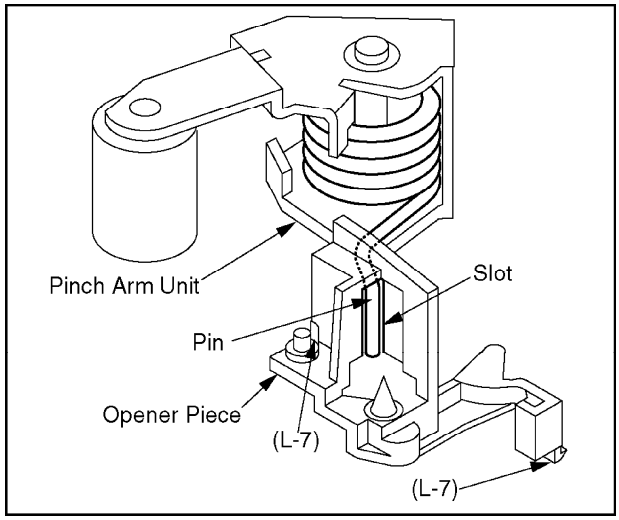
Fig. J10-2



2. Installation of Opener Piece

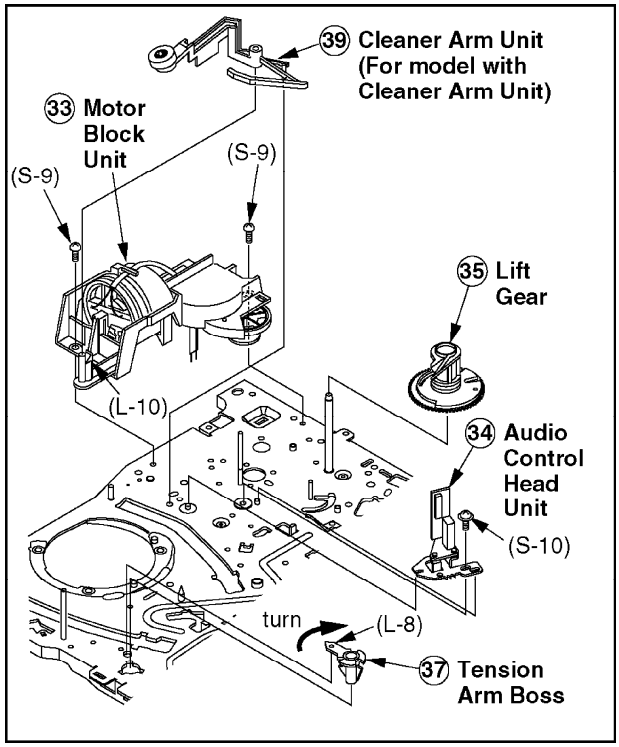
A. Install the Opener Piece so that the slot of the Opener Piece is inserted to the Pin of Pinch Arm Unit

Fig. J10-3



5.2.13. Motor Block Unit, Audio Control Head Unit, Lift Gear, Tension Arm Boss, and Cleaner Arm Unit

Fig. J11



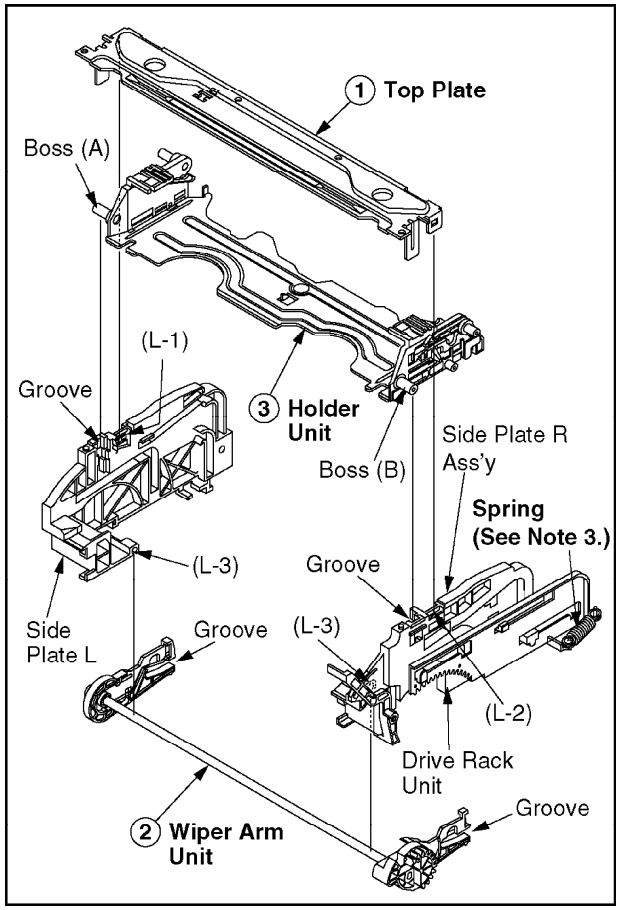
5.3. CASSETTE UP ASSEMBLY SECTION

This chart indicates Step/Location No. of Parts to be serviced and prior steps to gain access items to be serviced when disassembling. When reassembling, perform the step(s) in the reverse order.

Step/Loc. No.	Prior Step(s)	Part	Fig. No.	Remove	Alignment/Adjustment
①	----------	Top Plate	K1-1	(L-1), (L-2)	
②	1	Wiper Arm Unit	K1-1	2(L-3)	Gear Alignment
③	1,2	Holder Unit	K1-1	-	
④	----------	Opener Lever	K2	2(L-4)	
⑤	1,2,3,4	Drive Rack Unit	K2	-	

5.3.1. Top Plate, Wiper Arm Unit, and Holder Unit

Fig. K1-1



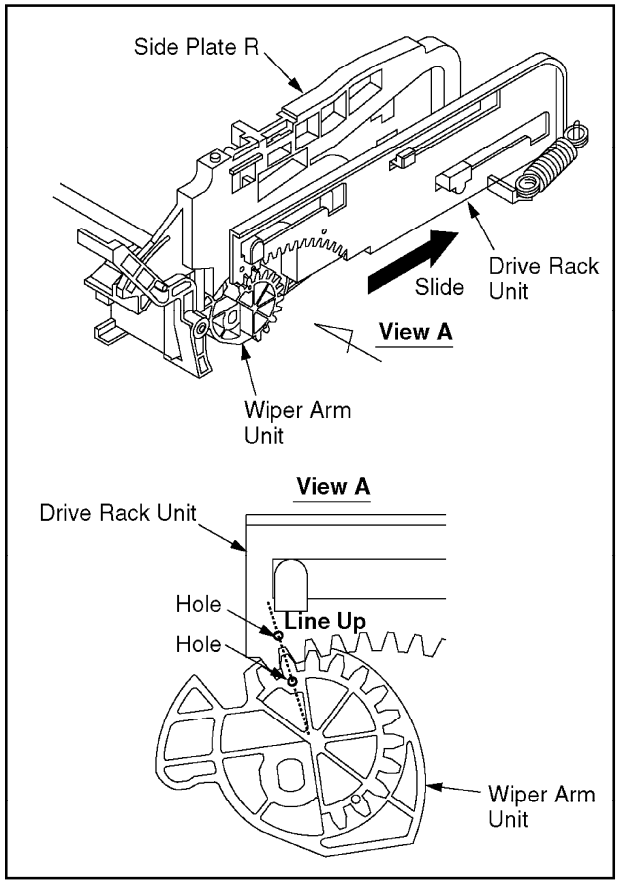
5.3.1.1. Reassembly Notes

1. Alignment of Wiper Arm Unit and Drive Rack Unit

A. Slide the Drive Rack Unit to the far right as indicated by the arrow.

B. Install the Wiper Arm Unit so that the hole on the Wiper Arm Unit is aligned with the hole on the Drive Rack Unit.

Fig. K1-2



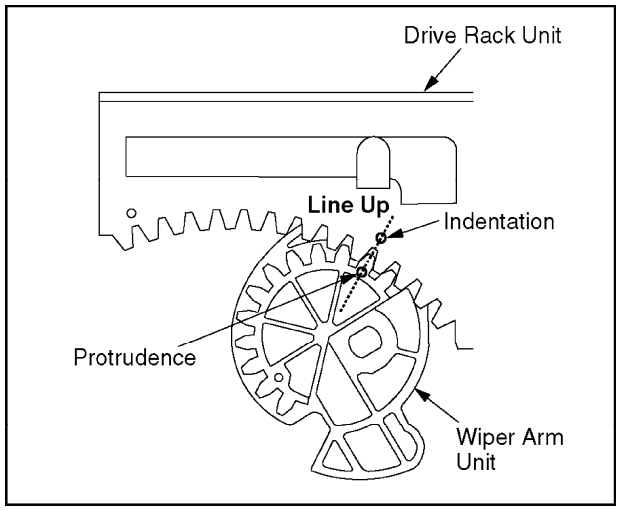
2. Installation of Holder Unit

A. Turn the Wiper Arm Unit so that the grooves on each end are aligned with the each groove on Side Plate L and R.

B. Insert Holder Unit boss (A) and (B) into the grooves as shown in Fig. K1-1.

C. Finally, in the EJECT Position, confirm that the protrudence on the Wiper Arm Unit is aligned with the indentation on the Drive Rack Unit.

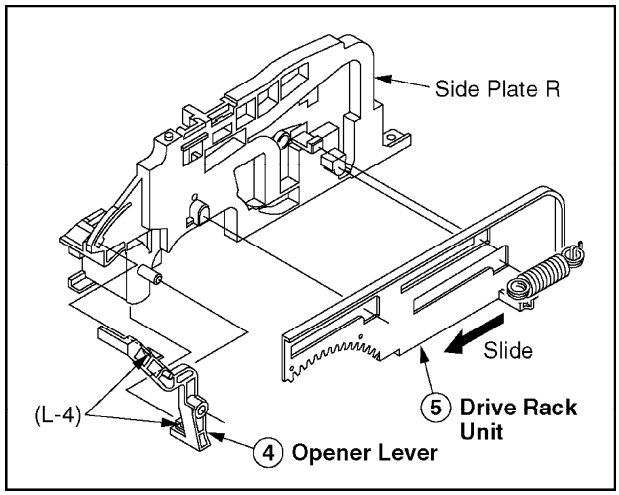
Fig. K1-3



3. Make sure to hook the spring to the Drive Rack Arm of Mechanism chassis.

5.3.2. Opener Lever and Drive Rack Unit

Fig. K2



6. ADJUSTMENT PROCEDURES

6.1. SERVICE FIXTURES AND TOOLS

VFMS0003H6 VHS Alignment Tape Video: Color Bar & Monoscope Audio: 6kHz(MONO)	Back Tension Meter (Made in USA., Purchase Locally)	VFK27 Head Cleaning Stick
VFK0330 H-Position Adjustment Driver	VFKS0081 Grease	VFK0329 Post Adjustment Driver
	DVDT-S01 DVD Test Disc	Firmware Disc for DVD Not supplied

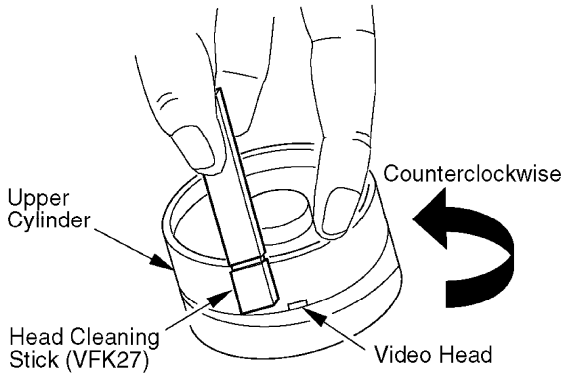
6.2. MECHANICAL ADJUSTMENT

6.2.1. CLEANING PROCEDURE FOR THE UPPER CYLINDER UNIT

1. While slowly turning the Upper Cylinder Unit counterclockwise by hand, gently rub the Video Heads with a Head Cleaning Stick (VFK27)

moistened with Ethanol.
When using a Cleaning Cassette, make sure to use "DRY" type only and be aware that excessive use can shorten head life.

Fig. M1



Note:

1. **Do not rub vertically or apply excess pressure to the Video Heads. Do not turn the Upper Cylinder Unit clockwise while cleaning.**
2. **After cleaning, use a Dry Head Cleaning Stick (VFK27) to remove any Ethanol remaining on the cylinder tape path. Otherwise, tape damage will occur.**

6.2.2. ADJUSTMENT PROCEDURES

6.2.2.1. BACK TENSION CONFIRMATION

Purpose:

To fine adjust the Back Tension so that the tape runs smoothly with a constant tension.

Symptom of Misadjustment:

1) If the tape tension is less than the specified value, the tape cannot come into proper contact with the Video Heads, resulting in poor picture playback.
2) If the tape tension is too high, the tape will soon be damaged.

Equipment Required:

Back Tension Meter (Made in U.S.A., Purchase Locally)
VHS Cassette Tape (120-Minute Tape)

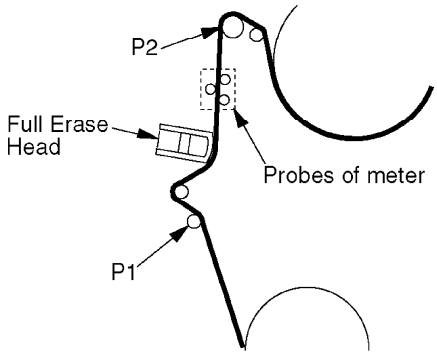
Specification:

22.4 gf±2.5 gf
(0.220 N±0.025 N)

1. **Play back a T120 cassette tape from the beginning for approx. 10 to 20 seconds to stabilize tape movement.**

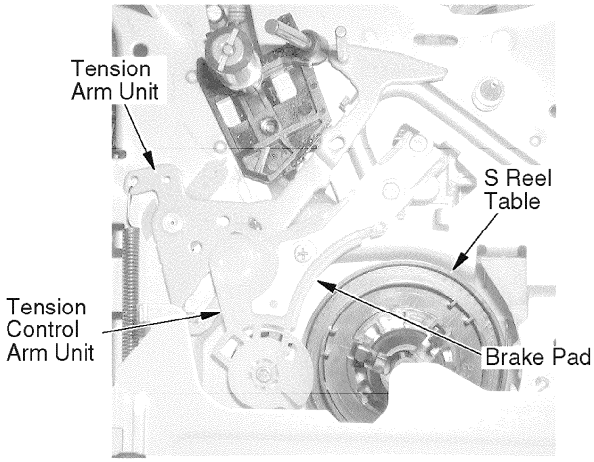
2. Insert a Tension Meter into tape path and measure the back tension.

Fig. M2-1



3. If the reading is out of specification, make sure that there is no dust or foreign material between the Brake Pad of Tension Control Arm Unit and the S Reel Table.
After cleaning, the reading of tension measurement is still out of specification, replace the Tension Arm Unit and the Tension Control Arm Unit.

Fig. M2-2



Note:

1. Be sure that the three probes of the meter are all in solid contact with the tape, but not touching any other parts of the mechanism.

2. It is recommended that measurements should be repeated at least three (3) times because the tension meter is very sensitive to external vibrations.

6.2.2.2. TAPE INTERCHANGEABILITY ADJUSTMENT

Note:

To perform these adjustment/confirmation procedures, enter the Tracking center mode.

Equipment Required:

Dual Trace Oscilloscope
VHS Alignment Tape (VFMS0003H6)
Post Adjustment Driver (VFK0329)
H-Position Adjustment Driver (VFK0330)

6.2.2.2.1. ENVELOPE OUTPUT ADJUSTMENT

The height of the P2 and P3 Posts replacement part is preadjust at the factory.

Purpose:

To achieve a satisfactory picture and secure precise tracking.

Symptom of Misadjustment:

If the envelope is output poorly, much noise will appear in the picture. Then the tracking will lose precision and the playback picture will be distorted by any slight variation of the tracking control circuit.

Equipment Required:

Post Adjustment Driver (VFK0329)

1. **Insert the alignment tape.**
2. **Press and hold FF button and CH DOWN buttons on VCR together over 5 seconds in power off condition.**
   The power comes on and the unit goes into service mode.
3. **Play back the alignment tape.**
4. **To enter Tracking center mode, press PLAY button in Play back mode. "TRACKING CENTER" will be displayed on the TV monitor.**
5. **Connect the oscilloscope to TP3002 on the Video Signal Process Section of the Main C.B.A. Use TP6205 as a trigger.**
6. **Confirm that the RF envelope is flat enough (V1/V-max. is 0.7 or more). If not, with Post Adjustment Driver, adjust P2 and P3 post height so that the envelope waveform becomes as flat (V1/V-max. is 0.7 or more) as possible (Noenvelope drop). If the envelope drop appears on the left -half of the waveform, adjust P2 post height. If the envelope drop appears on the right-half of the waveform, adjust P3 post height.**

CAUTION:

Overtightening P2 and P3 posts may cause the threads to strip.

Note:

It will be possible to confirm Step 6 according to following steps.

1. **Release the Tracking center mode.**
2. **Press the Tracking Control Up or Down button on remote control.**

Make sure that the envelope waveform remains flat. If not, readjust P2 and/or P3 post heights.

Fig. M3-1

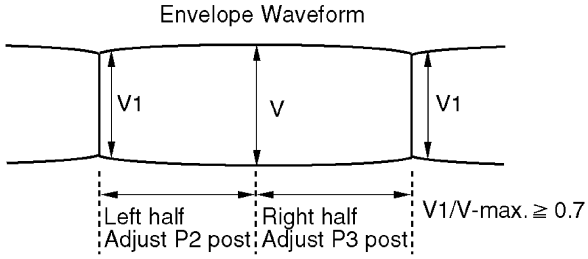
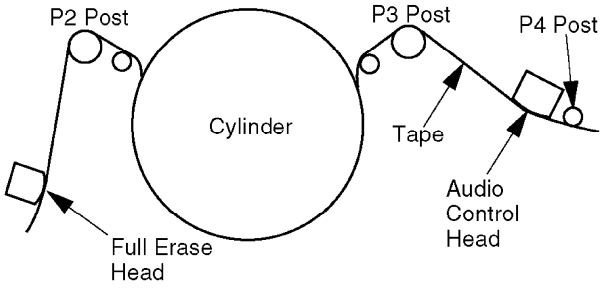
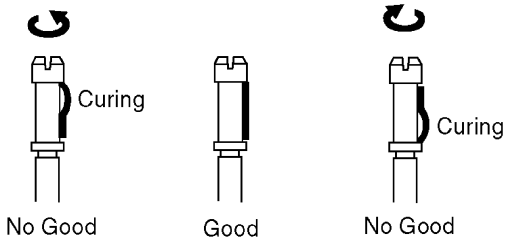


Fig. M3-2



7. After adjustment, confirm that the tape travels without curling at P2 and P3 posts.

Fig. M3-3



8. To release from Tracking center mode, press PLAY or STOP button.

6.2.2.2.2. AUDIO CONTROL HEAD TILT ADJUSTMENT

Purpose:

To confirm that the tape runs smoothly. In particular, confirm that the tape properly picks up the Audio Signal at the upper part of the head and the Control Signal at the lower part of the head.

Symptom of Misadjustment:

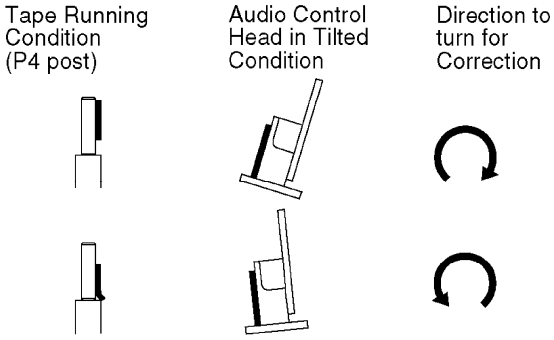
If the tilt of the Audio Control Head is poorly adjusted, the tape will eventually be damaged. An intermittent Blue screen may be seen in Playback.

1. Play back a T120 cassette tape and check that the tape travels

smoothly between the upper and lower guides of the P4 post.

2. **If necessary, adjust Black Screw (B) clockwise until the tape begins to curl at the lower edge of the P4 post. Then adjust the screw counterclockwise until the curling is eliminated.**

Fig. M4



6.2.2.2.3. AUDIO CONTROL HEAD HEIGHT ADJUSTMENT

The height of the Audio Control Head replacement part is preset at the factory.

Purpose:

To be sure the tape runs properly along the Control Head.

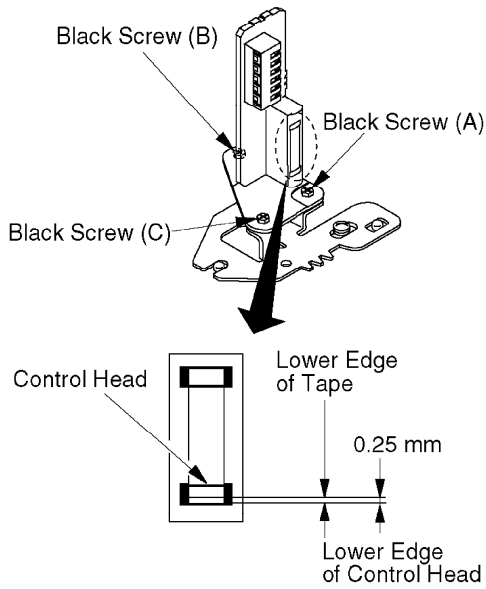
Symptom of Misadjustment:

If the control signal is not properly picked up, Servo Operation cannot be achieved. A Blue screen will be seen in Playback.

This confirmation is required when the Audio Control Head is replaced.

1. **Play back a T120 cassette tape and check that the lower edge of the tape runs approximately 0.25 mm above the lower edge of the Audio Control Head.**
2. **If necessary, adjust Black Screws (A) and (B) clockwise to lower the tape or counterclockwise to raise.**

Fig. M5



6.2.2.2.4. AUDIO CONTROL HEAD AZIMUTH ADJUSTMENT

Purpose:

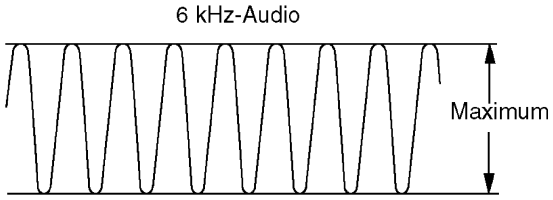
To adjust the position and height of the Audio Control Head so that it meets the tape tracks properly.

Symptom of Misadjustment:

If the position of the Audio Control Head is not properly adjusted, the Audio S/N Ratio is poor.

1. **Connect the oscilloscope to the audio output jack on the rear side of the deck.**
2. **Play back the 6 kHz Monaural Audio portion of the alignment tape.**
3. **Adjust Black Screw (C) on the Audio Control Head base so that the output level is at maximum.**

Fig. M6



4. **Confirm the height of the Audio Control Head is proper. If not, readjust Black Screws (A) and (B).**

6.2.2.2.5. AUDIO CONTROL HEAD HORIZONTAL POSITION ADJUSTMENT

Purpose:

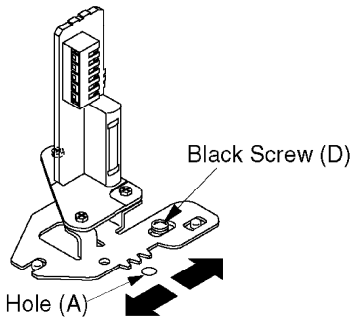
To adjust the Horizontal Position of the Audio Control Head.

Symptom of Misadjustment:

If the Horizontal Position of the Audio Control Head is not properly adjusted, a maximum envelope cannot be obtained at the Neutral Position of the Tracking Control Circuit.

1. **Insert the alignment tape.**
2. **Press and hold FF button and CH DOWN buttons on VCR together over 5 seconds in power off condition.**
   The power comes on and the unit goes into service mode.
3. **Play back the alignment tape.**
4. **To enter Tracking center mode, press PLAY button in Play back mode. "TRACKING CENTER" will be displayed on the TV monitor.**
5. **Connect the oscilloscope to TP3002 on the Video Signal Process Section of the Main C.B.A. Use TP6205 as a trigger.**
6. **Loosen the Black Screw (D) and tighten it slightly. Set the H-Position Adjustment Driver into the Hole (A). Then slowly turn the fixture either clockwise or counterclockwise so that the envelope is at maximum.**

Fig. M7



7. **Tighten Black Screw (D).**
8. **To release from Tracking center mode, press PLAY or STOP button.**

Note:

Old type of H-Position Adjustment Driver (VFK0136) can be used for this adjustment.

6.3. ELECTRICAL ADJUSTMENT

6.3.1. TEST EQUIPMENT

To do all of these electrical adjustments, the following equipment is required.

1. **Dual-Trace Oscilloscope**
   Voltage Range: 0.001 V to 50 V/Div.
   Frequency Range: DC to 50 MHz

Probes: 10:1, 1:1

2. Isolation Transformer (Variable)

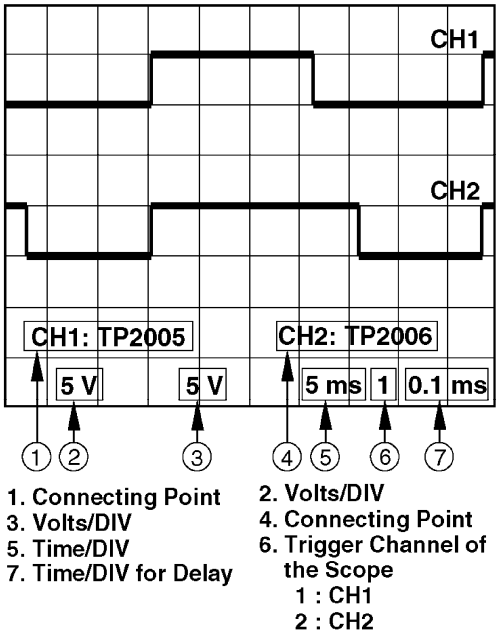
3. VHS Alignment Tape (VFMS0003H6)

4. DVD Test Disc (DVDT-S01)

5. TV monitor

6.3.2. HOW TO READ THE ADJUSTMENT PROCEDURES

Fig. E1



6.3.3. DVD LUMINANCE LEVEL ADJUSTMENT

Purpose:

To set the optimum luminance level for DVD.

Symptom of Misadjustment:

The picture is too bright or too dark.

Test Point:

TP8406 (DVD Main C.B.A.)

Adjustment:

R8044 (DVD Main C.B.A.)

Specification:

2.0 V[P-P]±100 mV[P-P]

Input:

Mode:

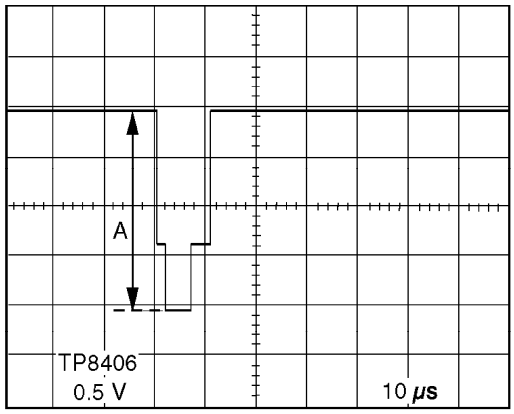
DVD PLAY

Equipment:

Oscilloscope, DVD Test Disc

1. **Playback 100% Flat Field on the DVD Test Disc in DVD PLAY Mode.**
2. **Connect the Oscilloscope to TP8406 on the DVD Main C.B.A. and GND (TP8521 on the DVD Main C.B.A.).**
3. **Adjust R8044 on the DVD Main C.B.A. so that the level A becomes 2.0 V[P-P]±100 mV[P-P].**

Fig. E2-1



6.3.4. EVR (Electronic Variable Resister) ADJUSTMENT WITH THE REMOTE CONTROL

This unit has electronic technology using I2C Bus concept.The PG SHIFTER ADJUSTMENT is adjusted by using " On Screen Display " and the remote control instead of adjusting mechanical controls (VR).

6.3.5. PG SHIFTER ADJUSTMENT

Purpose:

Determine the Video Head Switching Point during Playback.

Symptom of Misadjustment:

May cause Head Switching Noise and/or Vertical Jitter.

Test Point :

TP3001 (Main C.B.A.),
TP6205 (Main C.B.A.)

Specification:

T = 6 H±0.5 H (0.38 ms±0.03 ms)

Mode :

SP Playback

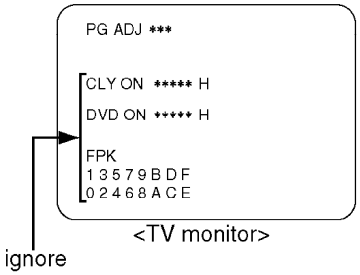
Equipment :

Oscilloscope,

VHS Alignment Tape (VFMS0003H6),
TV monitor

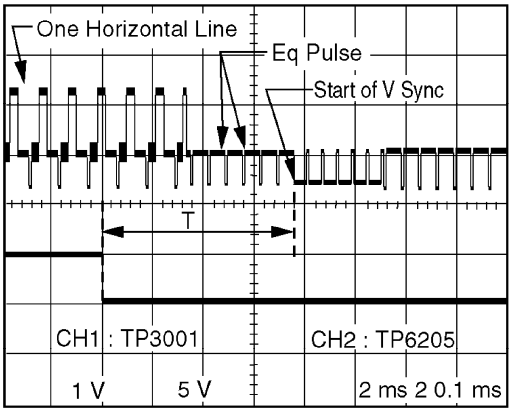
1. **Insert the VHS Alignment Tape. Then, turn off the power. Enter service mode by pressing and holding FF and CH DOWN buttons on VCR together for more than 5 seconds in power off condition.**
2. **Turn on the power and play back SP mode. Then press 100 button on the remote to enter EVR PG SHIFTER ADJUSTMENT Mode. PG ADJUSTMENT screen will appear on the TV monitor.**

Fig. E3-1



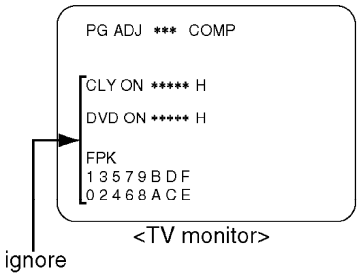
3. **Connect the channel-1 scope probe to TP3001 and the channel-2 scope probe to TP6205. Used TP6205 as a trigger.**
4. **Adjust value so that the trailing edge of the head switching pulse is placed 6 H±0.5 H (0.38 ms±0.03 ms) before the start of the vertical sync pulse by pressing CH UP and CH DOWN buttons on the remote control.**

Fig. E3-2



5. **After adjustment is completed, press REC button on the remote control. Then " COMP " will appear on the TV monitor and adjusted value will be written to Memory IC (IC6005).**

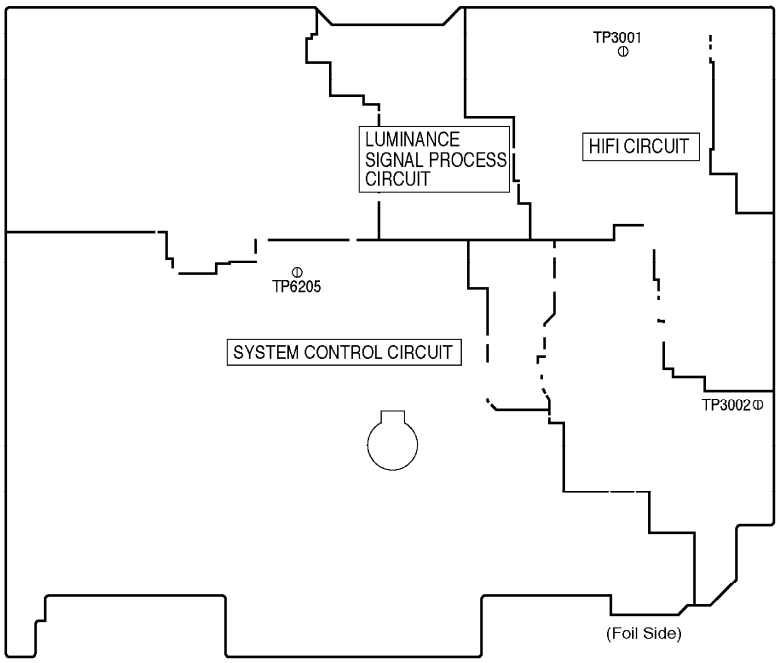
Fig. E3-3



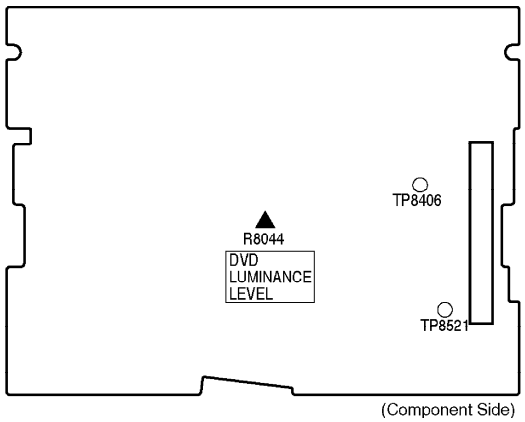
6. Press STOP button on the remote control to release from EVR PG SHIFTER ADJUSTMENT MODE.

6.4. TEST POINTS AND CONTROL LOCATION

Main C.B.A.



DVD Main C.B.A.



FUNCTION OF IMPORTANT TEST POINTS	
TP3001	Video Signal to Jack
TP3002	REC/PB Video envelope signal
TP6205	Head SW.

Test Point Information

⦶ Test Point with a jumper wire across a hole in the P.C.B.

○ Test Point with no Test Pin.

7. SCHEMATIC DIAGRAMS

7.1. SCHEMATIC DIAGRAM& CIRCUIT BOARD LAYOUT NOTES

7.2. MAIN SCHEMATIC DIAGRAMS

7.3. OPERATION I/OPERATION II SCHEMATIC DIAGRAMS

7.4. DVD MAIN SCHEMATIC DIAGRAMS

7.5. DVD SUB SCHEMATIC DIAGRAM

7.6. INTERCONNECTION SCHEMATIC DIAGRAM

7.7. VOLTAGE CHART

8. CIRCUIT BOARD LAYOUT

8.1. MAIN C.B.A.

8.2. OPERATION I/OPERATION II C.B.A.

8.3. DVD MAIN C.B.A.

8.4. DVD SUB C.B.A.

9. BLOCK DIAGRAMS

10. EXPLODED VIEWS

10.1. MECHANISM (TOP) SECTION

❶ MECHANISM (TOP) SECTION

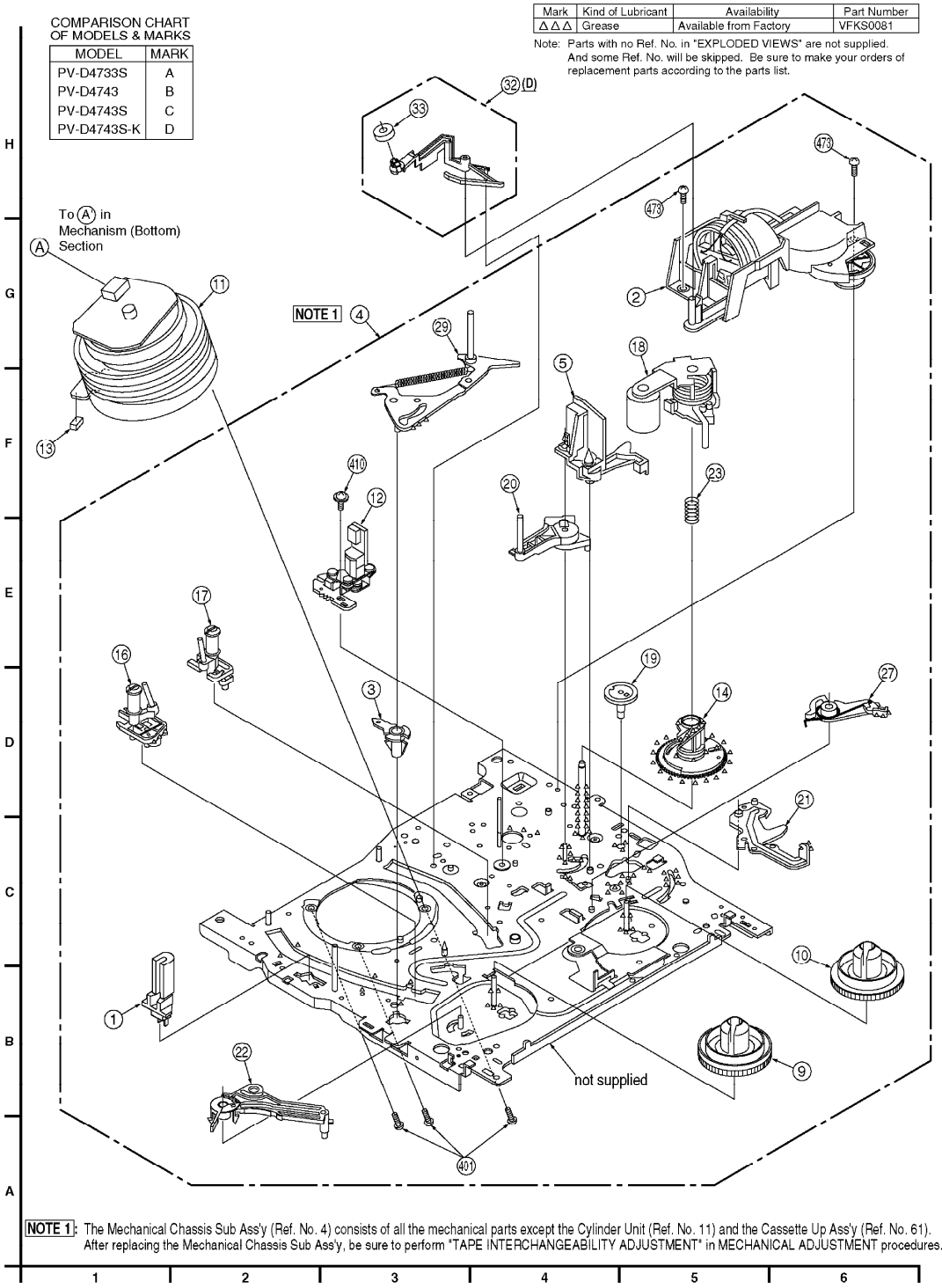
LUBRICATION POINTS
When the marked parts are replaced, apply the recommended lubricants or adhesive for better maintenance of the unit.

Mark	Kind of Lubricant	Availability	Part Number
△△△	Grease	Available from Factory	VFKS0081

Note: Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D



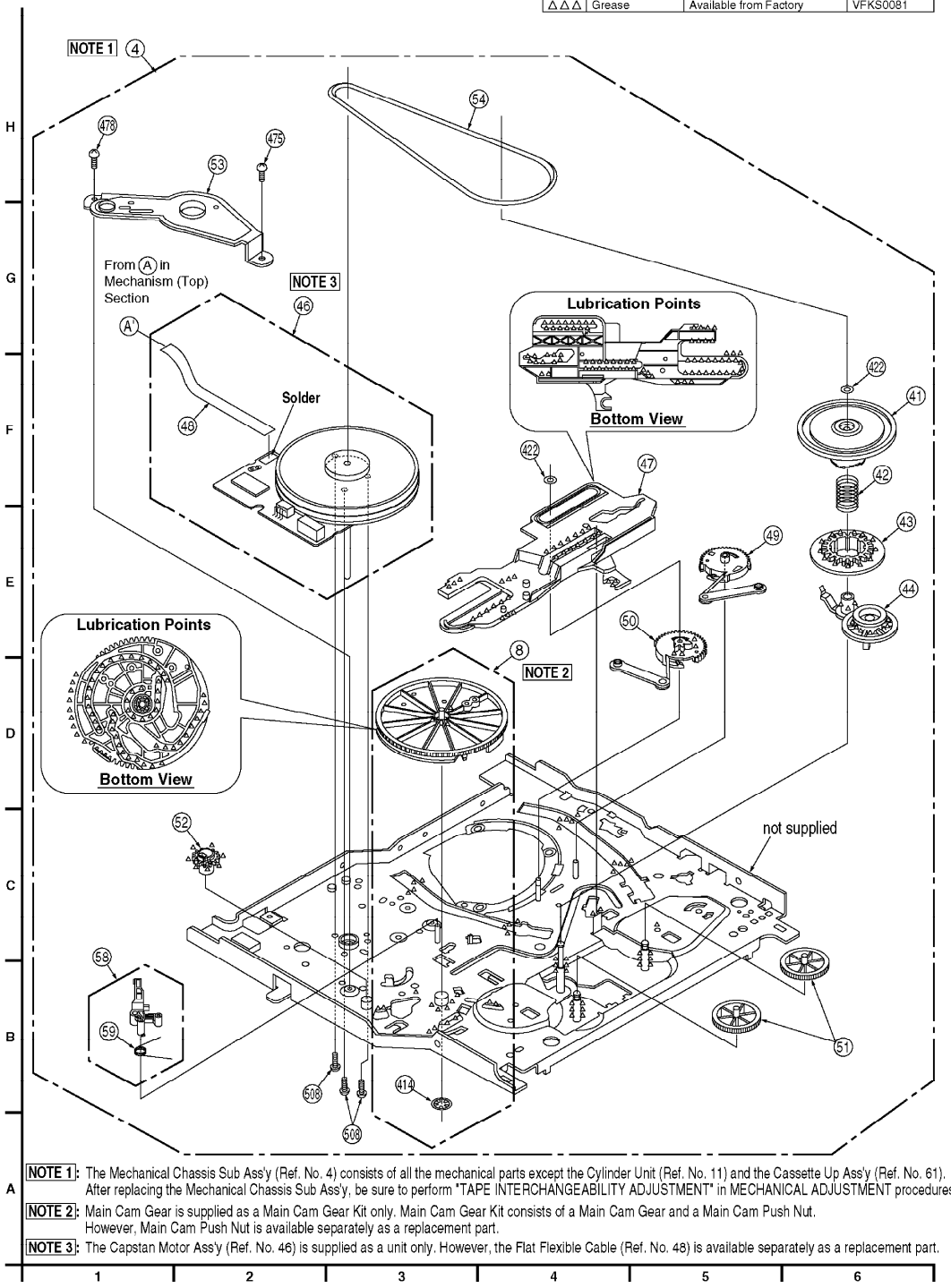
NOTE 1: The Mechanical Chassis Sub Ass'y (Ref. No. 4) consists of all the mechanical parts except the Cylinder Unit (Ref. No. 11) and the Cassette Up Ass'y (Ref. No. 61). After replacing the Mechanical Chassis Sub Ass'y, be sure to perform "TAPE INTERCHANGEABILITY ADJUSTMENT" in MECHANICAL ADJUSTMENT procedures.

10.2. MECHANISM (BOTTOM) SECTION

❷ MECHANISM (BOTTOM) SECTION

LUBRICATION POINTS
When the marked parts are replaced, apply the recommended lubricants or adhesive for better maintenance of the unit.

Mark	Kind of Lubricant	Availability	Part Number
△△△	Grease	Available from Factory	VFKS0081



NOTE 1: The Mechanical Chassis Sub Ass'y (Ref. No. 4) consists of all the mechanical parts except the Cylinder Unit (Ref. No. 11) and the Cassette Up Ass'y (Ref. No. 61). After replacing the Mechanical Chassis Sub Ass'y, be sure to perform "TAPE INTERCHANGEABILITY ADJUSTMENT" in MECHANICAL ADJUSTMENT procedures.

NOTE 2: Main Cam Gear is supplied as a Main Cam Gear Kit only. Main Cam Gear Kit consists of a Main Cam Gear and a Main Cam Push Nut. However, Main Cam Push Nut is available separately as a replacement part.

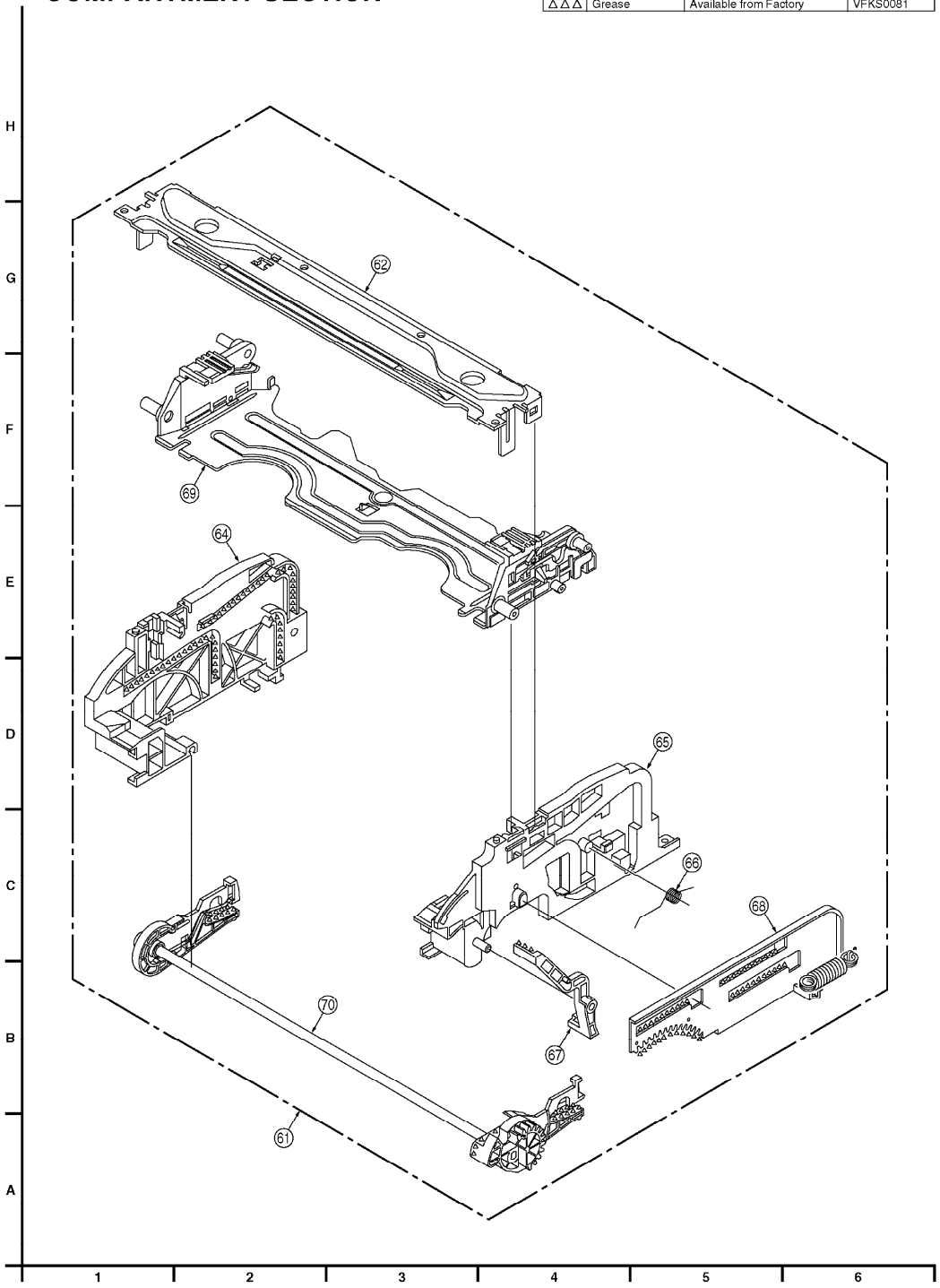
NOTE 3: The Capstan Motor Ass'y (Ref. No. 46) is supplied as a unit only. However, the Flat Flexible Cable (Ref. No. 48) is available separately as a replacement part.

10.3. CASSETTE UP COMPARTMENT SECTION

❸ CASSETTE UP COMPARTMENT SECTION

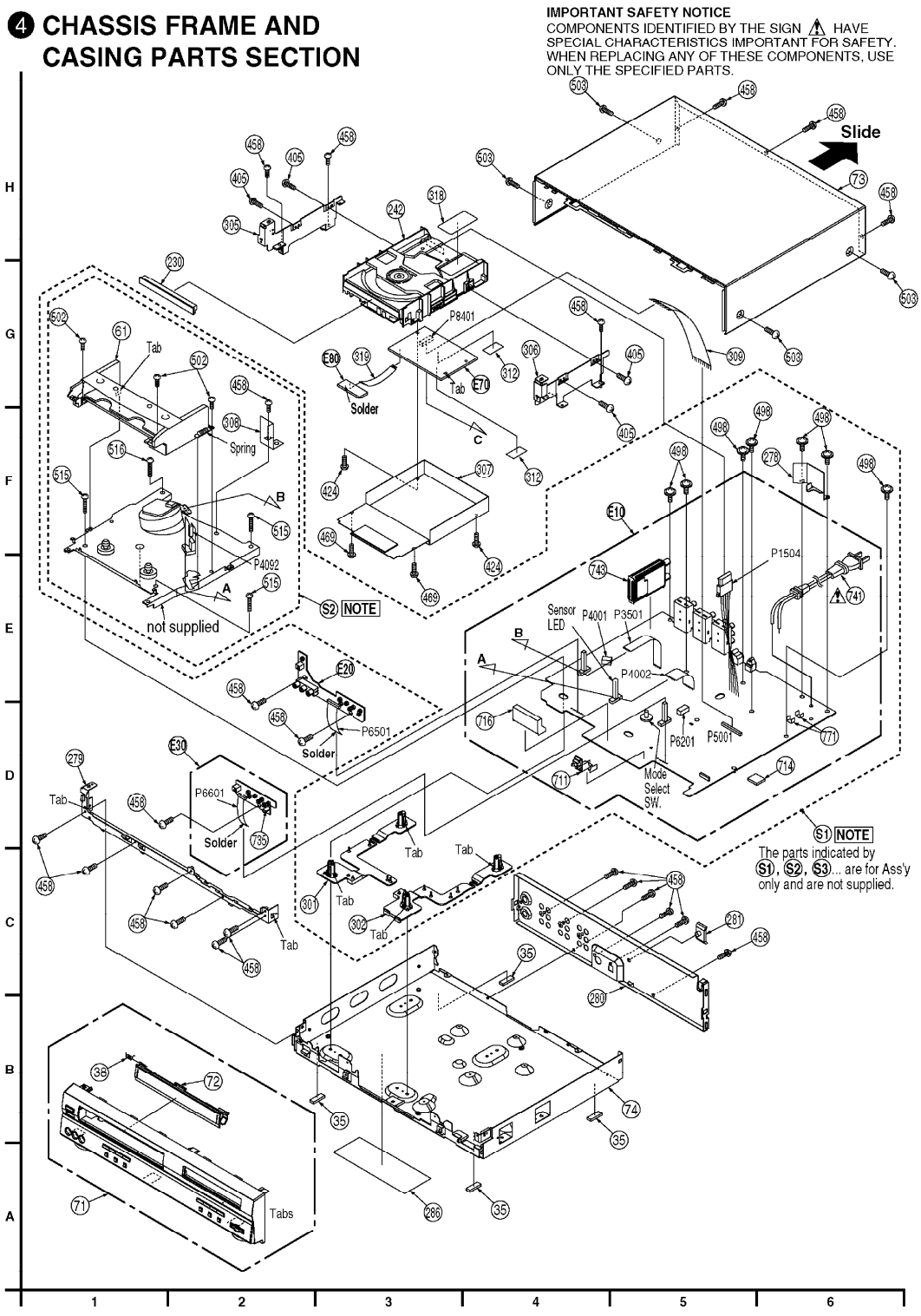
LUBRICATION POINTS
When the marked parts are replaced, apply the recommended lubricants or adhesive for better maintenance of the unit.

Mark	Kind of Lubricant	Availability	Part Number
△△△	Grease	Available from Factory	VFKS0081



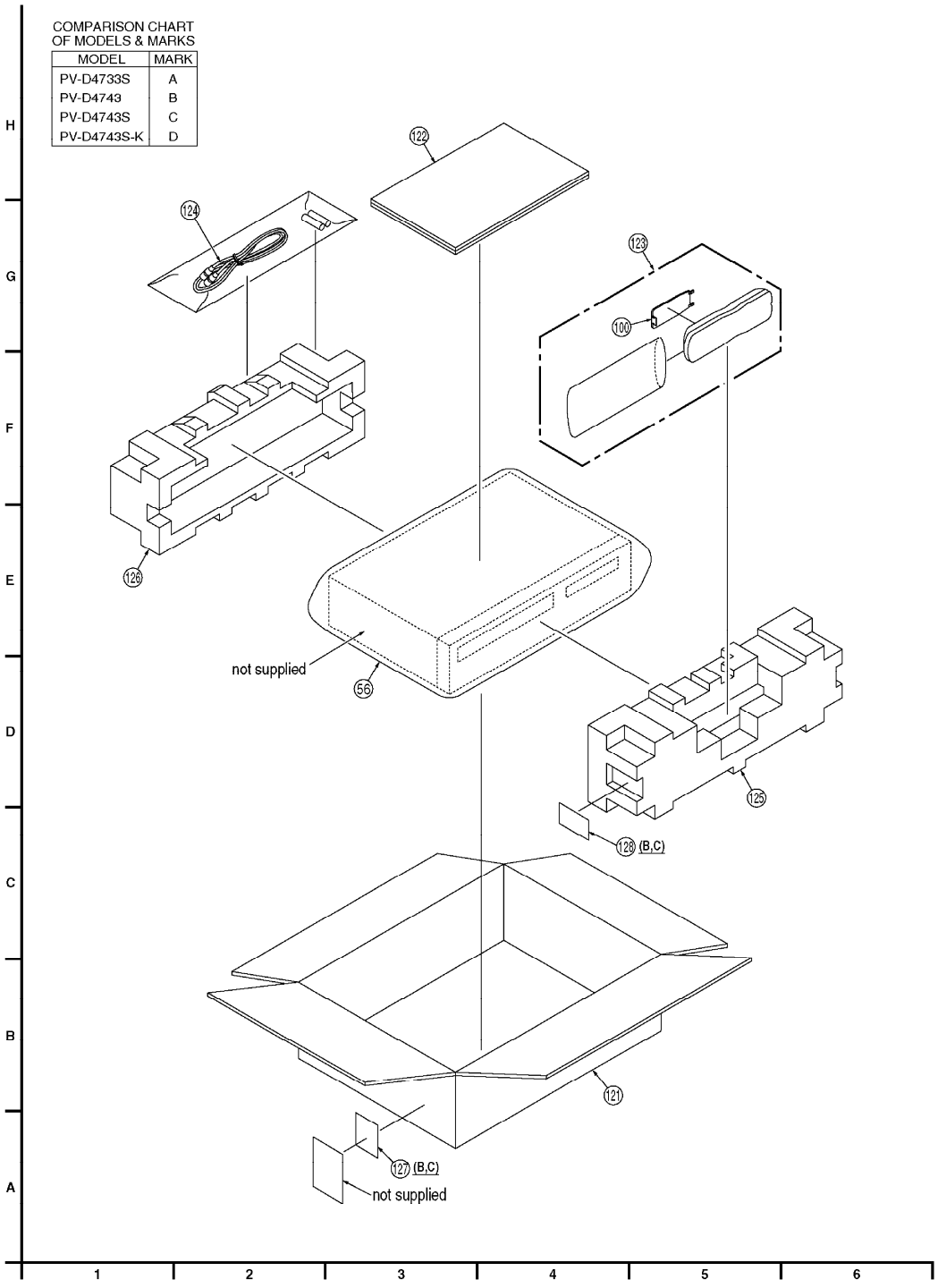
10.4. CHASSIS FRAME AND CASING PARTS SECTION

❹ CHASSIS FRAME AND CASING PARTS SECTION



10.5. PACKING PARTS AND ACCESSORIES SECTION

❺ PACKING PARTS AND ACCESSORIES SECTION



11. REPLACEMENT PARTS LISTS

BEFORE REPLACING PARTS, READ THE FOLLOWING:

11.1. REPLACEMENT NOTES

11.1.1. General Notes

1. Use only original replacement parts:

To maintain original function and reliability of repaired units, use only

original replacement parts which are listed with their part numbers in the parts list.

2. **IMPORTANT SAFETY NOTICE**
   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components, use only the specified parts.
3. **SPECIAL NOTE**
   All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.
4. **Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.**
5. **Parts different in shape or size may be used. However, only interchangeable parts will be supplied as service replacement parts.**
6. **Definition of Parts supplier:**
   A. Parts with mark "SPC" in the Remarks column are supplied from Spare Parts Center of Panasonic AVC Company.
   B. Parts with mark "MKE" in the Remarks column are supplied from MKE.
   C. Parts without mark in the Remarks column are supplied from MKI.
7. **Item numbers with capital letter E (Example: E10, E20,...) in the Ref. No. column are shown in the exploded views.**
8. **Parts whose Ref. Nos. are the same are interchangeable as replacement parts. Any of these parts may be ordered and used as a replacement part.**

11.1.2. Mechanical Replacement Notes

1. **Section No. of parts shown in Exploded Views are indicated in the Remarks column.**
2. **The Mechanical Chassis Sub Ass'y (Ref. No. 4) consists of all the mechanical parts except the Cylinder Unit (Ref. No. 11) and the Cassette Up Ass'y (Ref. No. 61).**
   After replacing the Mechanical Chassis Sub Ass'y, be sure to perform "TAPE INTERCHANGEABILITY ADJUSTMENT" in MECHANICAL

ADJUSTMENT procedures.

3. **Main Cam Gear is supplied as a Main Cam Gear Kit (Ref. No. 8) only. Main Cam Gear Kit consists of a Main Cam Gear and a Main Cam Push Nut. However, Main Cam Push Nut is available separately as a replacement part.**
4. **The Capstan Motor Ass'y (Ref. No. 46) is supplied as a unit only. However, the Flat Flexible Cable (Ref. No. 48) is available separately as a replacement part.**
5. **The Infrared Remote Control Unit (Ref. No. 123) replacement part is available as a complete assembly unit only. Do not try to disassemble the Infrared Remote Control Unit. However, the battery cover is available separately as a replacement part.**
6. **Main Cam Push Nut (Ref. No. 414) is not reusable. If removed, install a new one.**

11.1.3. Electrical Replacement Notes

1. **Unless otherwise specified;**
   All resistors are in Ω, K = 1,000 Ω, M = 1,000 kΩ.
2. **Abbreviation**

RTL:
Retention Time Limited
This indicates that the retention time is limited for this item. After the discontinuation of this item inproduction, it will no longer be available.

NR:
Non Repairable Board Ass'y

MGF CHIP:
Metal Glaze Film Chip

C CHIP:
Ceramic Chip

COMPLX CMP:
Complex Component

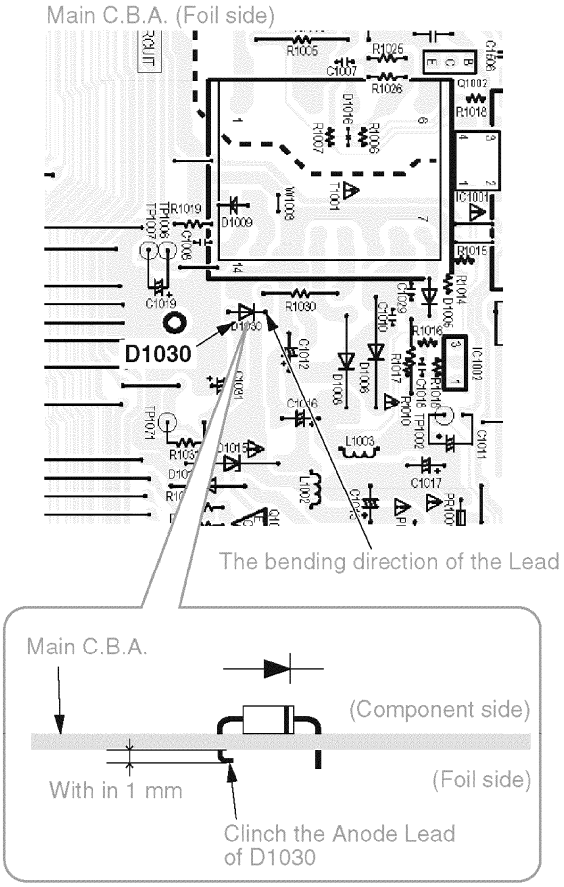
W FLMPRF:
Wirewound Flameproof

C.B.A.:
Circuit Board Assembly

P.C.B.:
Printed Circuit Board

E.S.D.:
Electrostatically Sensitive Devices

3. **When replacing 0 Ω resistor, a wire can be substituted for it.**
4. **Since the UHF/VHF TUNER/TV DEMODULATOR UNIT (Ref. No. 743) has already been pre-adjusted at the factory, do not try to adjust the UHF/VHF TUNER/TV DEMODULATOR UNIT. The UHF/VHF TUNER/TV DEMODULATORUNIT replacement part is available as a complete assembly unit only.**
5. **EEP ROM IC (IC6005), MAIN C.B.A. replacement note:**
   After replacing EEP ROM IC (IC6005) or MAIN C.B.A., be sure to perform the "PG SHIFTER ADJUSTMENT" in ELECTRICAL ADJUSTMENT procedures.
6. **DVD Unit replacement note:**
   After replacing the DVD Unit, the DVD Main C.B.A. or EEPROM IC (IC8002), confirm the Firmware version of DVD. If the version is different than that indicated on the Firmware Disc, update it using the Firmware Disc. Refer to "HOW TO UPDATE THE FIRMWAREOF DVD."
7. **D1030 replacement note:**
   When replacing D1030, be sure to clinch the anode lead of D1030 under the Main C.B.A. as specified below.



8. R6210 and C6202 replacement note for the models PV-D4733S, PV-D4743, and PV-D4743S:

Early units of the models PV-D4733S, PV-D4743, and PV-D4743S use a Main C.B.A. with suffix version number LSJB2082-1 which employs two different specifications as shown below.

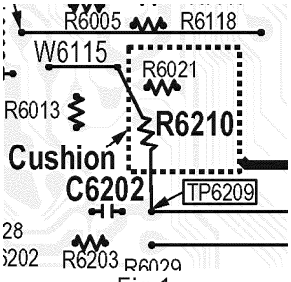


Fig.1

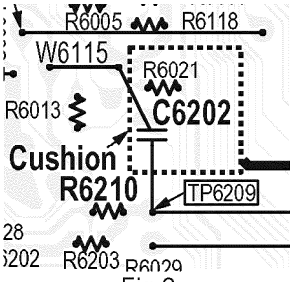


Fig.2

When replacing R6210 or C6202 on Main C.B.A. with suffix version number LSJB2082-1, order the RESISTOR KIT (LSUC0015), then replace both R6210 and C6202 at the same time as shown in Fig.2. The RESISTOR KIT (LSUC0015) consists of R6210 (ERJ6GEYJ825V), C6202 (ECKR1H102KB5), and a cushion (VMTS0059).

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D

11.2. MECHANICAL REPLACEMENT PARTS LIST

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D

Definition of Parts supplier:

1. Parts with mark "SPC" in the Remarks column are supplied from Spare Parts Center of Panasonic AVC Company.

2. Parts with mark "MKE" in the Remarks column are supplied from MKE.

3. Parts without mark in the Remarks column are supplied from MKI.

MECHANICAL REPLACEMENT PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
1	VBSS0033	FULL ERASE HEAD	1
2	LSXK0109	MOTOR BLOCK UNIT	1
3	LSDB0045	TENSION ARM BOSS	1
4	LSXY0440	MECHANICAL CHASSIS SUB ASS'Y	1,2
5	LSMD0209	OPENER PIECE	1
8	LSVD0007	MAIN CAM GEAR KIT	2
9	LSDR0004	S REEL TABLE	1
10	LSDR0005	T REEL TABLE	1
11	LSEG0070	CYLINDER UNIT	1
12	LSEH0004	AUDIO CONTROL/ERASE HEAD UNIT	1
13	K1MP09B00006	WIRE TRAP 9P	1
14	LSDG0112	LIFT GEAR	1
16	VXDS0213	LOADING POST BASE-S UNIT	1
17	VXDS0214	LOADING POST BASE-T UNIT	1
18	LSXL0079	PINCH ARM UNIT	1
19	LSDG0110	INTERMEDIATE GEAR A	1
20	LSXL0078	P5 ARM UNIT	1
21	LSML0360	DRIVE RACK ARM	1
22	LSXL0077	TENSION CONTROL ARM UNIT	1
23	LSMB0282	PINCH ASSIST SPRING	1
27	VXLS1130	T BRAKE UNIT	1
29	VXLS1129	TENSION ARM UNIT	1
32	VXLS1104	CLEANER ARM UNIT (D)	1
33	VDPS0269	CLEANER ROLLER (D)	1
35	LSKA0012	RUBBER FOOT	4
38	VMBS1161	CASSETTE DOOR SPRING	4
41	VXPS0389	CENTER CLUTCH UNIT	2

Ref. No.	Part No.	Part Name & Description	Remarks
42	VMBS1151	CHANGING GEAR SPRING	2
43	LSDG0114	CHANGING GEAR	2
44	VXLS1091	IDLER ARM UNIT	2
46	LSEM0078	CAPSTAN MOTOR ASS'Y	2
47	LSMM0004	MAIN ROD	2
48	LSJW0027	FLEXIBLE FLAT CABLE W/OUT PLUG	2
49	VXLS1099	S LOADING ARM UNIT	2
50	VXLS1098	T LOADING ARM UNIT	2
51	LSDG0116	REEL GEAR	2
52	LSDG0111	INTERMEDIATE GEAR B	2
53	LSMA0532	SUPPORT ANGLE	2
54	LSDV0009	CAPSTAN BELT SQUARE,ELASTOMER 2MM	2
56	LSPF0084	SHEET,POLYETHYLENE	5
58	LSXL0087	SS BRAKE ARM UNIT	2
59	LSMB0196	SS BRAKE SPRING	2
61	LSXY0483	CASSETTE UP ASS'Y	3,4
62	LSMA0352	TOP PLATE	3
64	LSMD0174	SIDE PLATE L	3
65	LSMD0173	SIDE PLATE R	3
66	LSMB0218	SUPPORT SPRING	3
67	LSML0096	OPENER LEVER	3
68	VXLS1111	DRIVE RACK UNIT	3
69	LSXA0497	HOLDER UNIT	3
70	VXLS1110	WIPER ARM UNIT	3
71	VYPS0146	FRONT PANEL ASS'Y (A,C,D)	4
71	VYPS0147	FRONT PANEL ASS'Y (B)	4
72	LSGP0344	CASSETTE DOOR-LID (A,C,D)	4
72	LSGP0345	CASSETTE DOOR-LID (B)	4
73	LSKM0950	TOP COVER (A,C,D)	4
73	LSKM0882	TOP COVER (B)	4
74	LSMP0398	BOTTOM COVER	4
100	LSKF0506	BATTERY COVER (A,C,D)	5
100	LSKF0505	BATTERY COVER (B)	5
121	LSPG1472	PACKING CASE,PAPER (A)	5
121	LSPG1468	PACKING CASE,PAPER (B)	5
121	LSPG1498	PACKING CASE,PAPER (C)	5
121	LSPG1522	PACKING CASE,PAPER (D)	5
122	LSQF0673	FAN BAG (A)	5
122	LSQF0674	FAN BAG (B,C)	5
122	LSQF0677	FAN BAG (D)	5
123	LSSQ0375	INFRARED REMOTE CONTROL UNIT (A,C,D)	5
123	LSSQ0374	INFRARED REMOTE CONTROL UNIT (B)	5
124	LSJA0418	VHS CONNECTING CABLE W/PLUG,0V	5
124	LSJA0274	VHF CONNECTING CABLE W/PLUG,0V	5
124	LSJA0328	VHF CONNECTING CABLE W/PLUG,0V	5
124	LSJA0372	VHF CONNECTING CABLE W/PLUG,0V	5
124	VJAS0212	VHF CONNECTING CABLE W/PLUG,0V	5
125	LSPN0318	FRONT CUSHION,STYROFOAM	5
126	LSPN0319	REAR CUSHION,STYROFOAM	5
127	CPS-1C	CHECK POINT LABEL (B,C)	5
128	N9ZZ00000027	SECURITY TAG (B,C)	5
230	LSGP0346	TRAY COVER (A,C,D)	4
230	LSGP0347	TRAY COVER (B)	4
242	LSXK0118	DVD MECHANISM UNIT	4
278	LSGF0518	POWER BARRIER	4
279	LSMP0400	FRONT COVER	4
280	LSMP0399	REAR COVER	4

Ref. No.	Part No.	Part Name & Description	Remarks
281	CKS-07-L	CLAMPER	4
286	LSQL1429	CAUTION LABEL	4
301	LSMK0831	FRAME PIECE L	4
302	LSMK0832	FRAME PIECE R	4
305	LSMA0651	ANGLE L	4
306	LSMA0652	ANGLE R	4
307	LSMA0648	SHIELD CASE	4
308	LSSC0621	A/C SHIELD PLATE	4
309	LSJW0042	FLAT FLEXIBLE CABLE,12V	4
312	LMMY0030	HEAT SHEET,SI	4
318	LSQL1415	RATING LABEL (A)	4
318	LSQL1419	RATING LABEL (B,C,D)	4
319	LSJW0029	FLAT FLEXIBLE CABLE,6V	4
401	VHDS0475	SCREW,STEEL	1
405	XTV3+6J	TAPPING SCREW,STEEL	4
410	VHDS0498	SCREW W/WASHER,STEEL	1
414	VHNS0070	MAIN CAM PUSH NUT,STEEL	2
422	XWGV2D5G	WASHER,NYLON	2
424	XYC26+CF8	SCREW W/WASHER,STEEL	4
458	XTV3+8J	TAPPING SCREW,STEEL	4
469	XSN3+6	SCREW,STEEL	4
473	XYN26+C6	SCREW W/WASHER,STEEL	1
475	XTV26+5FJ	TAPPING SCREW,STEEL	2
478	VHDS0495	SCREW,STEEL	2
498	XYE3+FJ8	SCREW,STEEL	4
502	LSHD0075	TAPPING SCREW,STEEL	4
503	XTB3+8JFN	TAPPING SCREW,STEEL (A,C,D)	4
503	XTB3+8JFZ	TAPPING SCREW,STEEL (B)	4
508	XTB26+6J	TAPPING SCREW,STEEL	2
515	LSHD0085	SCREW,STEEL	4
516	LSHD0086	SCREW,STEEL	4
711	LSSZ0004	INFRARED RECEIVER UNIT (A,B,C)	4
711	LSSZ0007	INFRARED RECEIVER UNIT (D)	4
714	VMTS0059	CUSHION,RUBBER	4
716	B3CJZ0000005	LED DISPLAY PANEL	4
735	LSMX0174	LED HOLDER	4
741	LSJA0360	AC CORD W/PLUG,AC 120V	4 ⚠
741	LSJA0348	AC CORD W/PLUG,AC 120V	4 ⚠
741	LSJA0358	AC CORD W/PLUG,AC 120V	4 ⚠
741	LSJA0359	AC CORD W/PLUG,AC 120V	4 ⚠
741	LSJA0361	AC CORD W/PLUG,AC 120V	4 ⚠
743	ENG56D01G1F	TUNER,UHF/VHF NR	4
771	EYF52BC	FUSE HOLDER	4
E10	LSEP2082HA	MAIN C.B.A. (A,B,C)	4 RTL
E10	LSEP2082HB	MAIN C.B.A. (D)	4 RTL
E20	LSEP2092A	OPERATION I C.B.A.	4 RTL
E30	LSEP2093A	OPERATION II C.B.A.	4 RTL
E70	LSEP2091B	DVD MAIN C.B.A. (A)	4 RTL
E70	LSEP2091C	DVD MAIN C.B.A. (B,C,D)	4 RTL
E80	LSEP2014A	DVD SUB C.B.A.	4 RTL

SERVICE FIXTURES AND TOOLS

Ref. No.	Part No.	Part Name & Description	Remarks
	VFMS0003H6	VHS ALIGNMENT TAPE	MKE
	VFKS0081	GREASE	MKE
	VFK0329	POST ADJUSTMENT DRIVER	MKE
	VFK27	HEAD CLEANING STICK	MKE
	VFK0330	H-POSITION ADJUSTMENT DRIVER	MKE
	DVDT-S01	DVD TEST DISC	SPC

11.3. ELECTRICAL REPLACEMENT PARTS LIST

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D

Definition of Parts supplier:

1. All parts are supplied from MKI.

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E10	LSEP2082HA	MAIN C.B.A. (A,B,C)	E.S.D. RTL
E10	LSEP2082HB	MAIN C.B.A. (D)	E.S.D. RTL
E20	LSEP2092A	OPERATION I C.B.A.	RTL
E30	LSEP2093A	OPERATION II C.B.A.	RTL
E70	LSEP2091B	DVD MAIN C.B.A. (A)	E.S.D. RTL
E70	LSEP2091C	DVD MAIN C.B.A. (B,C,D)	E.S.D. RTL
E80	LSEP2014A	DVD SUB C.B.A.	RTL

11.3.1. MAIN C.B.A.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC1001	CNC1S101RLL1	IC, LINEAR	⚠
IC1002	C0DAEMZ00005	IC, LINEAR	
IC1002	B1AZKD000001	IC, LINEAR	
IC1002	C0DAEMZ00001	IC, LINEAR	
IC1501	C5HABZZ00101	IC, LINEAR	⚠
IC1502	CNC1S101RLL1	IC, LINEAR	⚠
IC1503	C0DAEMZ00005	IC, LINEAR	
IC1503	B1AZKD000001	IC, LINEAR	
IC1503	C0DAEMZ00001	IC, LINEAR	
IC3001	NN13400A	IC, LINEAR	
IC3002	C1AB00001731	IC, CMOS STANDARD LOGIC	E.S.D.
IC3101	MN3885S	IC, LINEAR	
IC4201	AN3663FBP-V	IC, LINEAR	
IC4303	UPC4570G	IC, LINEAR	
IC4304	C0JBAR000002	IC, CMOS STANDARD LOGIC	E.S.D.
IC6001	MN101D06FPR	IC, 8BIT MICROCONTROLLER	E.S.D.
IC6002	B3NAA0000049	PHOTO INTERRUPUTER	
IC6003	B3NAA0000049	PHOTO INTERRUPUTER	
IC6004	C0EBJ0000080	IC, CMOS STANDARD LOGIC	E.S.D.
IC6004	C0EBJ0000099	IC, CMOS STADNARD LOGIC	E.S.D.
IC6004	RN5VS47CA-TR	IC, CMOS STANDARD LOGIC	E.S.D.
IC6005	LSEQ0696	IC, 1K EEP ROM	E.S.D.

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q1001	2SC4953001KT	TRANSISTOR SI NPN	⚠
Q1001	B1BADP000012	TRANSISTOR SI PNP	⚠
Q1001	2SC4533003KT	TRANSISTOR SI NPN	⚠
Q1001	2SC5842001KT	TRANSISTOR SI NPN	⚠
Q1002	2SD225900A	TRANSISTOR SI NPN	
Q1051	B1BACC000010	TRANSISTOR SI NPN	
Q1051	2SD1581-T	TRANSISTOR SI NPN	
Q1052	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q1052	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1053	2SD235800A	TRANSISTOR SI NPN CHIP	
Q1053	B1AAQB000002	TRANSISTOR SI NPN CHIP	
Q1053	B1BADC000001	TRANSISTOR SI NPN CHIP	
Q1070	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q1070	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q1071	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q1071	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1501	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q1501	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1502	B1DDCB000002	TRANSISTOR FET	
Q1503	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q1503	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q1504	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q1504	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1506	2SD23750P	TRANSISTOR SI NPN CHIP	
Q1506	2SD2396-K	TRANSISTOR SI NPN CHIP	
Q1509	2SD0602ARL	TRANSISTOR SI NPN CHIP	
Q1510	B1BACC000010	TRANSISTOR SI NPN	
Q1510	2SD1581-T	TRANSISTOR SI NPN	

Ref. No.	Part No.	Part Name & Description	Remarks
Q1511	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q1511	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q3002	2SB0709AHL	TRANSISTOR SI PNP CHIP	
Q3002	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q3003	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q3003	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q4001	2SB1218AHL	TRANSISTOR SI PNP CHIP	
Q4001	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q4002	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q4003	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q4009	UNR521500L	TRANSISTOR SI NPN CHIP	
Q4009	B1GBCFJA0006	TRANSISTOR SI NPN CHIP	
Q4012	UNR511500L	TRANSISTOR SI PNP CHIP	
Q4012	B1GDCFJJ0025	TRANSISTOR SI PNP CHIP	
Q4101	2SD0601ARL	TRANSISTOR SI NPN CHIP	
Q4304	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4304	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4306	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4306	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q6001	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q6001	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q6002	2SB0709AHL	TRANSISTOR SI PNP CHIP	
Q6002	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q6003	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q6003	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q6005	2SB0709AHL	TRANSISTOR SI PNP CHIP	
Q6005	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q6006	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q6006	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q6009	VEKS5707	PHOTO SENSOR UNIT	
Q6010	VEKS5707	PHOTO SENSOR UNIT	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D1002	B0HAHP000014	DIODE SI	
D1002	B0HAJP000007	DIODE SI	
D1002	B0HAMP000061	DIODE SI	
D1002	B0HAMP000069	DIODE SI	
D1003	B0HAHP000014	DIODE SI	
D1003	B0HAJP000007	DIODE SI	
D1003	B0HAMP000061	DIODE SI	
D1003	B0HAMP000069	DIODE SI	
D1005	B0HAHP000014	DIODE SI	
D1005	B0HAJP000007	DIODE SI	
D1005	B0HAMP000061	DIODE SI	
D1005	B0HAMP000069	DIODE SI	
D1006	B0HAMM000105	DIODE SI	
D1006	B0HAML000013	DIODE SI	
D1006	B0HAML000014	DIODE SI	
D1006	B0HANL000016	DIODE SI	
D1006	RGP15GL-5008	DIODE SI	
D1008	B0JAME000079	DIODE SI	
D1008	B0JAME000049	DIODE SI	
D1008	B0JANE000011	DIODE SI	
D1008	B0JANE000022	DIODE SI	
D1009	B0JCME000028	DIODE SI	
D1009	B0JCMD000006	DIODE SI	
D1009	B0JCMD000014	DIODE SI	
D1009	B0JCMD000018	DIODE SI	
D1009	MA2YD2300L	DIODE SI	
D1009	SFPJ-53	DIODE SI	
D1010	ERZV10V361CS	SUEGE ABSORBER	⚠
D1010	D4EAA3610001	SURGE ABSORBER	⚠
D1011	B0AAKT000010	DIODE SI	⚠
D1011	B0EAKT000027	DIODE SI	⚠
D1011	B0EAKT000030	DIODE SI	⚠
D1012	B0AAKT000010	DIODE SI	⚠
D1012	B0EAKT000027	DIODE SI	⚠
D1012	B0EAKT000030	DIODE SI	⚠
D1013	B0AAKT000010	DIODE SI	⚠
D1013	B0EAKT000027	DIODE SI	⚠
D1013	B0EAKT000030	DIODE SI	⚠
D1014	B0AAKT000010	DIODE SI	⚠
D1014	B0EAKT000027	DIODE SI	⚠
D1014	B0EAKT000030	DIODE SI	⚠
D1015	MA2180LA	DIODE ZENER 18V	⚠
D1015	B0BA01800025	DIODE ZENER 18V	⚠
D1015	1N4746A-T	DIODE ZENER 18V	⚠
D1015	1N4746ARL	DIODE ZENER 18V	⚠
D1016	MA2J11100L	DIODE SI CHIP	
D1016	B0ACCK000005	DIODE SI CHIP	
D1017	B0AAML000001	DIODE SI	
D1017	B0EAKL000008	DIODE SI	
D1030	B0HAHP000014	DIODE SI	
D1030	B0HAJP000007	DIODE SI	

Ref. No.	Part No.	Part Name & Description	Remarks
D1030	B0HAMP000061	DIODE SI	
D1030	B0HAMP000069	DIODE SI	
D1051	MAZ4110NHF	DIODE ZENER 11V	
D1070	MAZ41200MF	DIODE ZENER 12V	
D1502	B0JAMD000012	DIODE SI	
D1502	B0JAGE000001	DIODE SI	
D1502	B0JAME000082	DIODE SI	
D1503	B0HAJL000001	DIODE SI	
D1503	B0HAGP000012	DIODE SI	
D1504	B0HAJL000001	DIODE SI	
D1504	B0HAGP000012	DIODE SI	
D1505	B0HAJL000001	DIODE SI	
D1505	B0HAGP000012	DIODE SI	
D1506	B0HAJL000001	DIODE SI	
D1506	B0HAGP000012	DIODE SI	
D1507	B0HAHP000014	DIODE SI	
D1507	B0HAJP000007	DIODE SI	
D1507	B0HAMP000061	DIODE SI	
D1507	B0HAMP000069	DIODE SI	
D1508	B0HAMM000105	DIODE SI	
D1508	B0HAML000013	DIODE SI	
D1508	B0HAML000014	DIODE SI	
D1508	B0HANL000016	DIODE SI	
D1508	RGP15GL-5008	DIODE SI	
D1509	B0JAPG000024	DIODE SI	
D1509	B0JAPG000020	DIODE SI	
D1509	B0JAPG000021	DIODE SI	
D1517	MAZ4056NMF	DIODE ZENER 5.6V	
D1522	B0AAML000001	DIODE SI	
D1522	B0EAKL000008	DIODE SI	
D1525	MAZ4047NMF	DIODE ZENER 4.7V	
D1527	B0AAML000001	DIODE SI	
D1527	B0EAKL000008	DIODE SI	
D1528	MAZ20820A	DIODE ZENER 8.2V	
D1528	MAZ20820	DIODE ZENER 8.2V	
D1528	MAZ20820B	DIODE ZENER 8.2V	
D1529	MAZ20620A	DIODE ZENER 6.2V	
D1529	MAZ20620	DIODE ZENER 6.2V	
D1529	MAZ20620B	DIODE ZENER 6.2V	
D4209	MA2C165001VT	DIODE SI	
D4209	B0AACK000004	DIODE SI	
D4209	1SS119	DIODE SI	
D6001	VEKS5708	SENSOR LED UNIT	
D6003	MA2C165001VT	DIODE SI	
D6003	B0AACK000004	DIODE SI	
D6003	1SS119	DIODE SI	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R1001	VRESC2TK275	CARBON 1/2W 2.7M	⚠
R1001	VRESC2TK275C	CARBON 1/2W 2.7M	⚠
R1001	VRESC2TK275T	CARBON 1/2W 2.7M	⚠
R1003	D0AF334JA038	CARBON 1/2W 330K	
R1004	ERG2SJ333H	METAL OXIDE 2W 33K	
R1005	ERG1SJ560P	METAL OXIDE 1W 56	
R1006	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R1007	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1008	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R1010	ERD25FJ100P	CARBON 1/4W 10	⚠
R1010	ERD25FPJ100P	CARBON 1/4W 10	⚠
R1010	VRESF4FJ100P	CARBON 1/4W 10	⚠
R1014	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R1015	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R1016	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1017	D1BD2431A016	CARBON 1/10W 2.43K	
R1018	D0HD222ZA002	CARBON 1/10W 2.2K	
R1019	ERDS2T0	CARBON 1/4W 0	
R1025	ERDS2TJ300	CARBON 1/2W 30	
R1026	ERDS2TJ300	CARBON 1/2W 30	
R1030	ERD25FJ100P	CARBON 1/4W 10	
R1031	ERD2FCVG330T	CARBON 1/4W 33	
R1051	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R1052	ERDS2TJ153	CARBON 1/4W 15K	
R1053	ERDS2TJ153	CARBON 1/4W 15K	
R1057	ERDS2TJ331	CARBON 1/4W 330	
R1058	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1070	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R1071	ERJ6GEYJ154V	MGF CHIP 1/10W 150K	
R1072	ERDS2TJ473T	CARBON 1/4W 47K	
R1073	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R1074	ERDS2TJ392	CARBON 1/4W 3.9K	
R1501	D0AF473JA038	CARBON 1/2W 47K	
R1502	ERD2FCG681V	FUSE 1/4W 680	⚠
R1504	ERX2SJR22P	METAL FILM 2W 0.22	
R1505	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R1507	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R1508	ERG2SJ104P	METAL OXIDE 2W 100K	
R1510	ERDS2TJ100T	CARBON 1/4W 10	
R1511	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R1512	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1513	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R1514	ERJ6ENF6800V	MGF CHIP 1/10W 680	
R1515	ERJ6ENF1821V	MGF CHIP 1/16W 1820	
R1516	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R1517	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1518	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1519	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R1520	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1521	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R1522	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1523	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R1524	ERJ14YJ181H	MGF CHIP 1/4W 180	
R1527	ERDS1TJ272T	CARBON 1/2W 2.7K	

Ref. No.	Part No.	Part Name & Description	Remarks
R1529	ERDS1TJ272T	CARBON 1/2W 2.7K	
R1532	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R1536	ERDS2TJ153	CARBON 1/4W 15K	
R1537	ERDS2TJ153	CARBON 1/4W 15K	
R1538	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R3001	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R3003	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3004	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R3006	ERDS2TJ152	CARBON 1/4W 1.5K	
R3007	ERDS2TJ152	CARBON 1/4W 1.5K	
R3008	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R3009	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R3012	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3021	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R3022	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R3023	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3027	ERJ6GEYJ821V	MGF CHIP 1/10W 820	
R3029	ERJ6GEYJ125V	MGF CHIP 1/10W 1.2M	
R3031	ERJ6GEYJ474V	MGF CHIP 1/10W 470K	
R3033	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R3034	ERJ6GEYJ121V	MGF CHIP 1/10W 120	
R3035	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R3036	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R3041	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R3053	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3301	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3302	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R3305	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R3601	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R3602	ERDS2TJ750T	CARBON 1/4W 75	
R3603	ERDS2TJ750T	CARBON 1/4W 75	
R3604	ERDS2TJ750T	CARBON 1/4W 75	
R3605	ERDS2TJ750T	CARBON 1/4W 75	
R3606	ERDS2TJ750T	CARBON 1/4W 75	
R3607	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3608	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3609	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3610	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4001	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4002	ERJ6GEYJ334V	MGF CHIP 1/10W 330K	
R4003	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R4004	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4005	ERJ6GEYJ225V	MGF CHIP 1/10W 2.2M	
R4006	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R4007	ERJ6GEYJ821V	MGF CHIP 1/10W 820	
R4008	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R4010	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4011	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R4012	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R4014	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4015	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R4017	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4028	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4102	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4103	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R4201	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4202	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	

Ref. No.	Part No.	Part Name & Description	Remarks
R4203	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R4204	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R4205	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4206	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4207	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R4208	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R4209	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4210	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4213	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R4214	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R4218	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4224	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4225	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4226	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R4228	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4229	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4230	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4231	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R4232	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R4233	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4234	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4235	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R4236	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R4243	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4244	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4316	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4317	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4318	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4319	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4320	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4321	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R4322	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R4323	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R4324	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R4328	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4453	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R4455	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R4802	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R6001	ERDS2TJ101	CARBON 1/4W 100	
R6003	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6005	ERJ6GEYJ563V	MGF CHIP 1/10W 56K	
R6006	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6007	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K	
R6010	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6012	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6014	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6015	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6016	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6019	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6021	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6024	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6026	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6027	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6028	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6029	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R6030	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6031	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6033	ERDS2TJ681	CARBON 1/4W 680	
R6034	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6037	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R6044	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6045	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6052	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6057	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6059	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6060	ERJ6GEYJ105V	MGF CHIP 1/10W 1M	
R6062	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R6063	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R6064	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R6066	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R6069	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R6070	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R6072	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6073	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R6074	ERDS2TJ272	CARBON 1/4W 2.7K	
R6076	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6077	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6078	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6080	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6082	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6085	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6086	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6087	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6109	ERJ6GEYJ183V	MGF CHIP 1/10W 18K	
R6110	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6115	ERJ6GEYJ223V	MGF CHIP 1/10W 22K (A,B,C)	
R6116	ERJ6GEYJ223V	MGF CHIP 1/10W 22K (D)	
R6120	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6121	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6122	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6202	ERJ6GEYJ274V	MGF CHIP 1/10W 270K	
R6203	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6204	ERJ6GEYJ334V	MGF CHIP 1/10W 330K	
R6205	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R6210	LSUC0015	RESISTOR KIT *See Replacement Note	
R6210	ERJ6GEYJ825V	MGF CHIP 1/10W 8.2K *See Replacement Note	
R6228	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R6231	ERJ6GEYJ683V	MGF CHIP 1/10W 68K	
R6232	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R6233	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R6236	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6237	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6238	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6239	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6241	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6242	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6346	ERDS2TJ470	CARBON 1/4W 47	
R6363	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R6364	ERJ6GEYJ183V	MGF CHIP 1/10W 18K	
R6365	ERDS2T0	CARBON 1/4W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C1001	ECQU2A823MLA	POLYESTER 250V 0.082UF	⚠
C1001	LSCFQ2A823MC	POLYESTER 250V 0.082UF	⚠
C1002	ECKATS103MF	CERAMIC 250V 0.01UF	⚠
C1002	ECKETS103MF	CERAMIC 125V 0.01UF	⚠
C1002	VCKST3G103MY	CERAMIC 250V 0.01UF	⚠
C1002	VCKSU3D103MY	CERAMIC 125V 0.01UF	⚠
C1004	ECEA2DU121YE	ELECTROLYTIC 200V 120UF	⚠
C1004	F2A2D1210001	ELECTROLYTIC 200V 120UF	⚠
C1004	F2A2D1210003	ELECTROLYTIC 200V 120UF	⚠
C1004	VCESR2D121XE	ELECTROLYTIC 200V 120UF	⚠
C1005	ECA2DHG4R7B	ELECTROLYTIC 200V 4.7UF	
C1006	ECKR2H221KB5	CERAMIC 500V 220PF	
C1007	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C1008	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
C1009	VCYSBRE183KX	CERAMIC 25V 0.018UF	
C1010	ECJ2VC1H101J	C CHIP 50V 100PF	
C1011	ECA1HHG4R7I	ELECTROLYTIC 50V 4.7UF	
C1012	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1013	ECA1EM331B	ELECTROLYTIC 25V 330UF	
C1016	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1017	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1018	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C1019	ECA0JM471	ELECTROLYTIC 6.3V 470UF	
C1025	ECKDRS101MBY	CERAMIC 125V 100PF	⚠
C1025	ECKATS101MB	CERAMIC 250V 100PF	⚠
C1025	ECKETS101MB	CERAMIC 125V 100PF	⚠
C1025	ECKMRS101MBY	CERAMIC 125V 100PF	⚠
C1025	VCKSTJG101KW	CERAMIC 125V 100PF	⚠
C1025	VCKSTLG101KW	CERAMIC 125V 100PF	⚠
C1025	VCKSUJD101KW	CERAMIC 125V 100PF	⚠
C1025	VCKSULD101KW	CERAMIC 125V 100PF	⚠
C1029	ECJ2VC1H101J	C CHIP 50V 100PF	
C1030	VCYSBRE183KX	CERAMIC 25V 0.018UF	
C1031	ECA1HM470I	ELECTROLYTIC 50V 47UF	
C1051	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C1052	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1058	ECEA0JEE101B	ELECTROLYTIC 6.3V 100UF	
C1059	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C1060	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C1070	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C1501	ECKATS332ME8	CERAMIC 250V 3300PF	⚠
C1501	ECKDNB332ME8	CERAMIC 125V 3300PF	⚠
C1501	ECKETS332ME8	CERAMIC 125V 3300PF	⚠
C1501	VCKST3G332MX	CERAMIC 250V 3300PF	⚠
C1501	VCKSU3D332MX	CERAMIC 125V 3300PF	⚠
C1502	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C1503	ECJ2VC1H471J	C CHIP 50V 470PF	
C1505	F1B3D471A011	CERAMIC 2KV 470PF	
C1506	ECKR2H221KB5	CERAMIC 500V 220PF	

Ref. No.	Part No.	Part Name & Description	Remarks
C1507	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C1508	ECA2DHG4R7B	ELECTROLYTIC 200V 4.7UF	
C1509	ECJ2VB1H821K	C CHIP 50V 820PF	
C1510	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1511	F2A0J2220018	ELECTROLYTIC 6.3V 2200UF	
C1512	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C1515	ECA0JFE102XE	ELECTROLYTIC 6.3V 1000UF	
C1516	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1517	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C1518	ECA1CM331B	ELECTROLYTIC 16V 330UF	
C1519	ECA0JFE102XE	ELECTROLYTIC 6.3V 1000UF	
C1520	ECJ2VB1H332K	C CHIP 50V 3300PF	
C1529	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1538	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C1542	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1550	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1552	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C1553	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3001	ECA0JM471	ELECTROLYTIC 6.3V 470UF	
C3005	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3008	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3013	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3014	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3015	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3017	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C3018	ECJ2VC1H181J	C CHIP 50V 180PF	
C3019	ECJ2VC1H560J	C CHIP 50V 56PF	
C3021	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C3023	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3024	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C3025	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3026	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3027	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C3028	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3029	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3030	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3031	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C3032	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C3033	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C3034	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C3035	ECJ2VC1H680J	C CHIP 50V 68PF	
C3037	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C3038	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C3039	ECJ2VB1H822K	C CHIP 50V 8200PF	
C3040	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C3041	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3043	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3044	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C3045	ECJ2VF1C474Z	C CHIP 16V 0.47UF	
C3047	ECJ2VC1H181J	C CHIP 50V 180PF	
C3048	ECJ2VC1H560J	C CHIP 50V 56PF	
C3049	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3050	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3051	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3052	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3053	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C3054	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C3055	ECJ2VB1H392K	C CHIP 50V 3900PF	
C3056	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C3062	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3101	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C3102	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3104	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3105	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3106	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C3108	ECJ2VB1H102K	C CHIP 50V 1000PF	
C3109	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3302	ECEA1HKSR47I	ELECTROLYTIC 50V 0.47UF	
C3303	ECJ2VC1H121J	C CHIP 50V 120PF	
C3306	ECEA1HKSR47I	ELECTROLYTIC 50V 0.47UF	
C3308	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3501	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3502	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3503	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3504	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3505	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3506	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3507	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3508	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3509	ECEA1CKA100	ELECTROLYTIC 16V 10UF (D)	
C3510	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C3514	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3515	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C3518	ECJ2VF1C105Z	C CHIP 16V 1UF	
C3519	ECJ2VB1H102K	C CHIP 50V 1000PF	
C3520	ECJ2VF1C105Z	C CHIP 16V 1UF	
C4001	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C4002	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4003	ECJ2VB1H272K	C CHIP 50V 2700PF	
C4004	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4005	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C4006	ECJ2VB1H102K	C CHIP 50V 1000PF	
C4007	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C4008	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C4009	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4010	ECJ2VB1E273K	C CHIP 25V 0.027UF	
C4011	ECJ2VB1H822K	C CHIP 50V 8200PF	
C4012	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4013	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C4014	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4017	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4102	ECQB1562JF	POLYESTER 100V 5600PF	
C4103	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4104	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4106	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C4201	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4202	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4203	ECEA0JKA330	ELECTROLYTIC 6.3V 33UF	
C4204	ECEA0JKA330	ELECTROLYTIC 6.3V 33UF	
C4205	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4206	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4207	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4208	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4209	ECEA1CKA100	ELECTROLYTIC 16V 10UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C4210	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4211	ECJ2VB1H153K	C CHIP 50V 0.015UF	
C4212	ECJ2VB1H153K	C CHIP 50V 0.015UF	
C4213	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4214	ECEA1CKA101	ELECTROLYTIC 16V 100UF	
C4216	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4217	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C4218	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4219	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4227	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C4229	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4230	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C4239	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4240	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4241	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4242	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4317	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4318	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4319	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4320	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4321	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4322	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4323	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4324	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4325	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4326	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4451	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4452	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4455	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4456	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4458	ECJ2VF1E104Z	C CHIP 25V 0.1UF (A,B,C)	
C4459	ECEA0JKA221	ELECTROLYTIC 6.3V 220UF (A,B,C)	
C4459	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF (D)	
C4801	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C4802	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4803	ECJ2VC1H270J	C CHIP 50V 27PF	
C4901	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4902	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C4903	ECEA1HKA3R3	ELECTROLYTIC 50V 3.3UF	
C4904	ECEA1HKA3R3	ELECTROLYTIC 50V 3.3UF	
C4905	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4906	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4911	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C4912	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4913	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C4917	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4918	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4919	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C4920	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C6001	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C6003	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C6005	ECJ2VC1H100C	C CHIP 50V 10PF	
C6006	ECJ2VC1H090C	C CHIP 50V 9PF	
C6019	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C6020	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C6021	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C6026	ECJ2VB1H102K	C CHIP 50V 1000PF	

Ref. No.	Part No.	Part Name & Description	Remarks
C6027	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C6033	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6201	ECJ2VB1H332K	C CHIP 50V 3300PF	
C6202	LSUC0015	RESISTOR KIT *See Replacement Note	
C6202	ECKR1H102KB5	CERAMIC 50V 1000PF *See Replacement Note	
C6203	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C6204	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C6217	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C6218	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C6221	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C6223	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C6224	VCESAM0J331I	ELECTROLYTIC 6.3V 330UF	
C6228	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C6231	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6232	ECA1HM470I	ELECTROLYTIC 50V 47UF	
C6233	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C6305	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C6316	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C6317	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C7001	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF (A,B,C)	
C7001	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF (D)	
C7010	ECJ2VB1H102K	C CHIP 50V 1000PF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L1001	ELF21V010A	LINE FILTER	⚠
L1002	VLQSAB7D220K	COIL 22UH	
L1003	VLQSAB7D100K	COIL 10UH	
L1006	J0JHB0000021	FILTER	
L1501	J0JHB0000021	FILTER	
L1502	J0JHB0000021	FILTER	
L1503	G0A220YA0001	CHOKE COIL 22UH	
L1504	VLQSAB7D100K	COIL 10UH	
L3002	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L3005	ELESN101KA	COIL 100UH	
L3014	ELEXT330KE04	COIL 33UH	
L3016	ELESN330KA	COIL 33UH	
L3018	ELESN470KA	COIL 47UH	
L3101	ELESN101KA	COIL 100UH	
L3506	ELESN101KA	COIL 100UH	
L3507	ELESN101KA	COIL 100UH	
L3601	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L3602	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L3603	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L3604	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L3605	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L4001	ELELN153KA	COIL 15MH	
L4101	ELESN471KA	COIL 470UH	
L4201	ELESN101KA	COIL 100UH	
L4303	ELESN101KA	COIL 100UH	
L4451	ELESN101KA	COIL 100UH	
L4801	ELESN220KA	COIL 22UH	
L4804	LSLF0035	EMI FILTER CHIP	
L6201	ELEXT101KE04	COIL 100UH	
L6302	ELESN4R7KA	COIL 4.7UH	

Ref. No.	Part No.	Part Name & Description	Remarks
L7003	ELEXT101KE04	COIL 100UH	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X3010	H0D357400071	CRYSTAL OSCILLATOR	
X6001	VSXS0232-TB	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P1529	VEKS5891	CONNECTOR CABLE W/PLUG	
P3501	LSJWM9N065LN	CONNECTOR CABLE W/PLUG,DC 9V	
P4001	VJSS0888	FE CONNECTOR 2P	
P4002	LSJWM6N130LN	CONNECTOR CABLE W/PLUG,DC 9V	
P5001	K1MN25A00025	CONNECTOR 37P	
P6201	K1KA12A00234	CONNECTOR 12P	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW6001	LSSH0002	LEAF SWITCH-SAFETY TAB	
SW6002	LSSS0012	MODE SELECT SWITCH	

FUSE& PROTECTOR

Ref. No.	Part No.	Part Name & Description	Remarks
F1001	K5D302AQ0003	FUSE 125V 3A	⚠
F1001	K5D302ADA002	FUSE 125V 3A	⚠
F1001	K5D302ADA006	FUSE 125V 3A	⚠
F1001	K5D302AD0002	FUSE 125V 3A	⚠
PR1001	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1001	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1001	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1002	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1002	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1002	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1501	LSSF009A35E	IC PROTECTOR 1.5A	⚠
PR1502	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1502	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1502	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1503	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1503	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1503	LSSF009A25E	IC PROTECTOR 1.5A	⚠

TRANSFORMER

Ref. No.	Part No.	Part Name & Description	Remarks
T1001	ETS28AD2J3AC	SW TRANSFORMER	⚠
T1001	LSTP0105-2	TRANSFORMER	⚠
T1001	VTPS0042	SW TRANSFORMER	⚠
T1501	LSTP0113-6	TRANSFORMER	⚠
T4101	G2A252C00002	TRANSFORMER	

JACKS

Ref. No.	Part No.	Part Name & Description	Remarks
JK3001	K2HA608B0004	AUDIO/VIDEO JACK SOCKET	
JK3003	K1CB105B0035	S-VHS JACK SOCKET	
JK3004	K2HA507B0002	AUDIO/VIDEO JACK SOCKET	
JK4801	K7AAAB000009	IC, LINEAR	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
711	LSSZ0004	INFRARED RECEIVER UNIT (A,B,C)	
711	LSSZ0007	INFRARED RECEIVER UNIT (D)	
716	B3CJZ0000005	LED DISPLAY PANEL	
741	LSJA0360	AC CORD W/PLUG,AC 120V	⚠
741	LSJA0348	AC CORD W/PLUG,AC 120V	⚠
741	LSJA0358	AC CORD W/PLUG,AC 120V	⚠
741	LSJA0359	AC CORD W/PLUG,AC 120V	⚠
741	LSJA0361	AC CORD W/PLUG,AC 120V	⚠
743	ENG56D01G1F	TUNER,UHF/VHF NR	
771	EYF52BC	FUSE HOLDER	

11.3.2. OPERATION I C.B.A.

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R6501	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6502	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R6503	ERJ6GEYJ123V	MGF CHIP 1/10W 12K	
R6504	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6505	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R6506	ERJ6GEYJ123V	MGF CHIP 1/10W 12K	
R6507	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P6501	LSJWMAN060AA	CONNECTOR CABLE W/PLUG,5V	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW6501	EVQ21405R	SWITCH PUSH	
SW6502	EVQ21405R	SWITCH PUSH	
SW6503	EVQ21405R	SWITCH PUSH	
SW6504	EVQ21405R	SWITCH PUSH	
SW6505	EVQ21405R	SWITCH PUSH	
SW6506	EVQ21405R	SWITCH PUSH	
SW6507	EVQ21405R	SWITCH PUSH	
SW6508	EVQ21405R	SWITCH PUSH	

JACKS

Ref. No.	Part No.	Part Name & Description	Remarks
JK7801	K2HA306A0022	FRONT AUDIO/VIDEO JACK SOCKET	

11.3.3. OPERATION II C.B.A.

RANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q6601	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q6601	B1ABCF000011	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D6601	B3ABA0000452	LED GREEN	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R6601	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6602	ERDS2TJ181T	CARBON 1/4W 180	
R6603	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6604	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R6605	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6606	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P6601	LSJWM7N060AA	CONNECTOR CABLE W/PLUG,5V	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW6601	EVQ21405R	SWITCH PUSH	
SW6602	EVQ21405R	SWITCH PUSH	
SW6603	EVQ21405R	SWITCH PUSH	
SW6604	EVQ21405R	SWITCH PUSH	
SW6605	EVQ21405R	SWITCH PUSH	
SW6606	EVQ21405R	SWITCH PUSH	
SW6607	EVQ21405R	SWITCH PUSH	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
735	LSMX0174	LED HOLDER	

11.3.4. DVD MAIN C.B.A.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC8001	MN2DS0002VP	IC, LINEAR	
IC8002	LSSK0024	IC, 4K EEPROM	E.S.D.
IC8003	C1DB00000918	IC, LINEAR	
IC8005	C0DBZFZ00011	IC, LINEAR	
IC8005	C0DBZFZ00010	IC, LINEAR	
IC8201	LSSK0021	IC, 16M FLASH MEMORY (A)	E.S.D.
IC8201	LSSK0020	IC, 16M FLASH MEMORY (B,C,D)	E.S.D.
IC8202	C0JBAH000074	IC, CMOS STANDARD LOGIC	E.S.D.
IC8202	C0JBAH000078	IC, CMOS STANDARD LOGIC	E.S.D.
IC8203	C0JBAH000074	IC, CMOS STANDARD LOGIC	E.S.D.
IC8203	C0JBAH000078	IC, CMOS STANDARD LOGIC	E.S.D.
IC8204	C3ABQJ000001	IC, 128MBIT SD RAM	E.S.D.
IC8204	C3ABQJ000005	IC, 128MBIT SD RAM	E.S.D.
IC8204	C3ABQJ000012	IC, 128MBIT SD RAM	E.S.D.
IC8401	C9ZB00000377	IC, LINEAR	
IC8501	C0FBBK000035	IC, LINEAR	
IC8503	AN6552S	IC, LINEAR	
IC8801	C0GBL0000003	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q8601	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q8601	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q8602	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q8602	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q8603	2SB14400RL	TRANSISTOR SI PNP	
Q8603	2SB14400SL	TRANSISTOR SI PNP	
Q8901	UNR521100L	TRANSISTOR SI NPN CHIP	
Q8901	B1GBCFJJ0007	TRANSISTOR SI PNP CHIP	
Q8902	UNR511500L	TRANSISTOR SI PNP CHIP	
Q8902	B1GDCFJJ0025	TRANSISTOR SI PNP CHIP	
Q8905	B1CFGD000002	TRANSISTOR FET	
Q8905	XP0187800L	TRANSISTOR FET	
Q8906	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q8906	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q8907	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q8907	B1ADCF000001	TRANSISTOR SI PNP CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R8001	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8002	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8004	ERJ12YJ1R0U	MGF CHIP 1/2W 1	
R8005	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8013	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R8014	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R8017	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8020	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8021	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8022	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8023	ERJ3GEYJ270V	MGF CHIP 1/16W 27	
R8024	EXB38V330JV	ARRAY CHIP 33	
R8028	EXB38V330JV	ARRAY CHIP 33	
R8031	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8032	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8033	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8034	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8036	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8042	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8043	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8044	EVM3YSX50B23	VARIABLE 2K	
R8202	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8212	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8213	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8223	EXB38V330JV	ARRAY CHIP 33	
R8226	EXB38V330JV	ARRAY CHIP 33	
R8230	EXB38V330JV	ARRAY CHIP 33	
R8235	EXB38V330JV	ARRAY CHIP 33	
R8239	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R8241	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R8242	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8244	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8248	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8249	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R8253	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8259	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8263	EXB38V330JV	ARRAY CHIP 33	
R8267	EXB38V330JV	ARRAY CHIP 33	
R8268	EXB38V330JV	ARRAY CHIP 33	
R8272	EXB38V330JV	ARRAY CHIP 33	
R8423	ERJ3GEYJ750V	CARBON CHIP 1/16W 75	
R8424	ERJ3GEYJ750V	CARBON CHIP 1/16W 75	
R8425	ERJ3GEYJ750V	CARBON CHIP 1/16W 75	
R8426	ERJ3GEYJ360V	MGF CHIP 1/16W 36	
R8427	ERJ3GEYJ360V	MGF CHIP 1/16W 36	
R8501	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8502	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8503	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8504	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8518	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8520	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8533	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8534	ERJ3GEYJ622V	MGF CHIP 1/16W 6.2K	
R8535	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8536	ERJ3GEYJ622V	MGF CHIP 1/16W 6.2K	
R8557	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8558	ERJ3GEYJ471V	MGF CHIP 1/16W 470	

Ref. No.	Part No.	Part Name & Description	Remarks
R8565	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8566	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8567	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8568	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8569	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8604	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8605	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8606	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8608	ERJ3GEYF392V	MGF CHIP 1/16W 3.9K	
R8626	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8627	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8628	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8629	ERJ3GEYJ683V	MGF CHIP 1/16W 68K	
R8631	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8632	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8633	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8634	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8637	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8638	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8639	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8640	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8643	ERJ3GEYJ271V	MGF CHIP 1/16W 270	
R8644	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R8645	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8646	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8647	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8648	ERJ3GEYJ203V	MGF CHIP 1/16W 20K	
R8649	ERJ3GEYJ203V	MGF CHIP 1/16W 20K	
R8650	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8801	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8807	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R8808	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8809	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	
R8810	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	
R8811	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	
R8812	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8813	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1.0	
R8814	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8815	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1.0	
R8816	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1.0	
R8817	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1.0	
R8818	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8901	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8905	ERJ3GEYJ823V	MGF CHIP 1/16W 82K	
R8907	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8909	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R8910	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R8911	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R8912	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8913	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8914	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8915	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8916	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8921	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8922	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8923	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8924	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R8925	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8926	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8927	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8928	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8929	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8930	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C8001	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8002	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8005	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8006	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8007	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8008	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8009	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8010	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8011	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8012	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8013	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8014	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C8015	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8016	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8017	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8018	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8019	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8020	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8021	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8022	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8023	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8024	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8025	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8026	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8027	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8028	ECJ1VC1H330J	C CHIP 50V 33PF	
C8029	ECJ1VF1A105Z	C CHIP 10V 1UF	
C8030	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8031	ECJ1VF1A105Z	C CHIP 10V 1UF	
C8032	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8033	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8034	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8035	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8036	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8037	ECJ1VC1H080C	C CHIP 50V 8PF	
C8038	ECJ1VC1H080C	C CHIP 50V 8PF	
C8039	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8040	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8041	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8201	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8202	ECJ1VF1A105Z	C CHIP 10V 1UF	
C8203	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8204	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8205	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8206	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8207	ECJ1VF1C104Z	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8208	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8209	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8210	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8211	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8212	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8213	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8214	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8215	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8216	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8217	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8430	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8431	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8432	ECJ1VC1H330J	C CHIP 50V 33PF	
C8434	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8435	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C8436	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C8437	ECJ1VC1H220J	C CHIP 50V 22PF	
C8439	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8440	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8441	ECJ1VC1H330J	C CHIP 50V 33PF	
C8443	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8444	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8445	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C8446	ECJ1VC1H330J	C CHIP 50V 33PF	
C8448	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8449	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C8450	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8451	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C8452	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8453	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8504	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8505	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8506	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8507	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8508	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8512	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8513	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8520	ECEA1AKA330I	ELECTROLYTIC 10V 33UF	
C8521	ECEA1CKA101	ELECTROLYTIC 16V 100UF	
C8522	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8523	ECEA1AKA330I	ELECTROLYTIC 10V 33UF	
C8536	ECJ1VC1H101J	C CHIP 50V 100PF	
C8537	ECJ1VC1H101J	C CHIP 50V 100PF	
C8544	ECJ1VB1H102K	C CHIP 50V 1000PF	
C8545	ECJ1VB1H102K	C CHIP 50V 1000PF	
C8553	ECJ1VB1H472K	C CHIP 50V 4700PF	
C8555	ECJ1VB1H472K	C CHIP 50V 4700PF	
C8568	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8569	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8571	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8572	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8573	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8574	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8603	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8604	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8605	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8606	ECJ1VF1H333Z	C CHIP 50V 0.033UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8607	ECJ1VC1H330J	C CHIP 50V 33PF	
C8608	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8609	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8610	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8611	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8612	ECJ1VF1H103Z	C CHIP 50V 0.01UF	
C8613	ECJ1VC1H101J	C CHIP 50V 100PF	
C8614	ECJ1VB1E183K	C CHIP 25V 0.018UF	
C8615	ECJ1VB1H562K	C CHIP 50V 5600PF	
C8616	ECJ2VF1C105Z	C CHIP 16V 1UF	
C8617	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8618	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8619	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8620	ECJ1VC1H221J	C CHIP 50V 220PF	
C8621	ECJ1VF1H103Z	C CHIP 50V 0.01UF	
C8622	ECJ1VF1A105Z	C CHIP 10V 1UF	
C8623	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8624	ECJ1VF1A105Z	C CHIP 10V 1UF	
C8625	ECJ1VB1H152K	C CHIP 50V 1500PF	
C8626	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8630	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C8632	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C8638	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8639	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8640	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8642	ECJ1VF1H103Z	C CHIP 50V 0.01UF	
C8643	ECJ1VF1H103Z	C CHIP 50V 0.01UF	
C8644	ECJ1VC1H560J	C CHIP 50V 56PF	
C8645	ECJ1VC1H560J	C CHIP 50V 56PF	
C8806	F1K1A106A005	C CHIP 10V 10UF	
C8808	F1K1A106A005	C CHIP 10V 10UF	
C8809	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8810	ECJ1VC1H391J	C CHIP 50V 390PF	
C8811	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8812	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8813	ECJ1VC1H391J	C CHIP 50V 390PF	
C8814	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8815	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8816	ECJ1VB1H472K	C CHIP 50V 4700PF	
C8817	F1K1A106A005	C CHIP 10V 10UF	
C8818	F1K1A106A005	C CHIP 10V 10UF	
C8901	ECJ1VC1H680J	C CHIP 50V 68PF	
C8904	ECJ1VC1H471J	C CHIP 50V 470PF	
C8906	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8907	ECJ1VC1H221J	C CHIP 50V 220PF	
C8911	ECJ1VC1H561J	C CHIP 50V 560PF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL8401	F1Z1E2220002	EMI FILTER	
FL8402	J0HAAG000015	EMI FILTER CHIP	
FL8403	J0HAAG000015	EMI FILTER CHIP	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L8002	J0JHC0000027	EMI FILTER CHIP	
L8003	J0JDC0000002	EMI FILTER CHIP	
L8004	J0JCC0000117	EMI FILTER CHIP	
L8005	J0JCC0000215	EMI FILTER CHIP	
L8006	J0JCC0000215	EMI FILTER CHIP	
L8007	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8411	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8412	J0JHC0000068	EMI FILTER CHIP	
L8413	J0JHC0000078	EMI FILTER CHIP	
L8418	J0JBC0000010	EMI FILTER CHIP	
L8419	J0JBC0000010	EMI FILTER CHIP	
L8420	J0JBC0000010	EMI FILTER CHIP	
L8421	J0JBC0000010	EMI FILTER CHIP	
L8422	J0JBC0000010	EMI FILTER CHIP	
L8423	J0JBC0000010	EMI FILTER CHIP	
L8424	J0JBC0000010	EMI FILTER CHIP	
L8426	J0JHC0000078	EMI FILTER CHIP	
L8427	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L8428	J0JBC0000010	EMI FILTER CHIP	
L8429	J0JHC0000078	EMI FILTER CHIP	
L8431	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8433	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8434	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8435	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8436	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8437	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8440	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8441	G1C1R0K00005	INDUCTOR CHIP	
L8442	G1CR39K00009	INDUCTOR CHIP	
L8443	G1C1R0K00005	INDUCTOR CHIP	
L8444	G1C1R0K00005	INDUCTOR CHIP	
L8501	J0JBC0000010	EMI FILTER CHIP	
L8503	J0JBC0000010	EMI FILTER CHIP	
L8504	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8516	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8517	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8601	J0JDC0000002	EMI FILTER CHIP	
L8602	J0JDC0000002	EMI FILTER CHIP	
L8620	J0JDC0000002	EMI FILTER CHIP	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X8001	H0J368500019	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P8401	K1MN25A00025	CONNECTOR 37P	
P8402	K1MR10B00029	CONNECTOR 10P	
P8801	K1MN13B00062	CONNECTOR 13P	
P8901	K1MN26B00076	CONNECTOR 26P	

11.3.5. DVD SUB C.B.A.

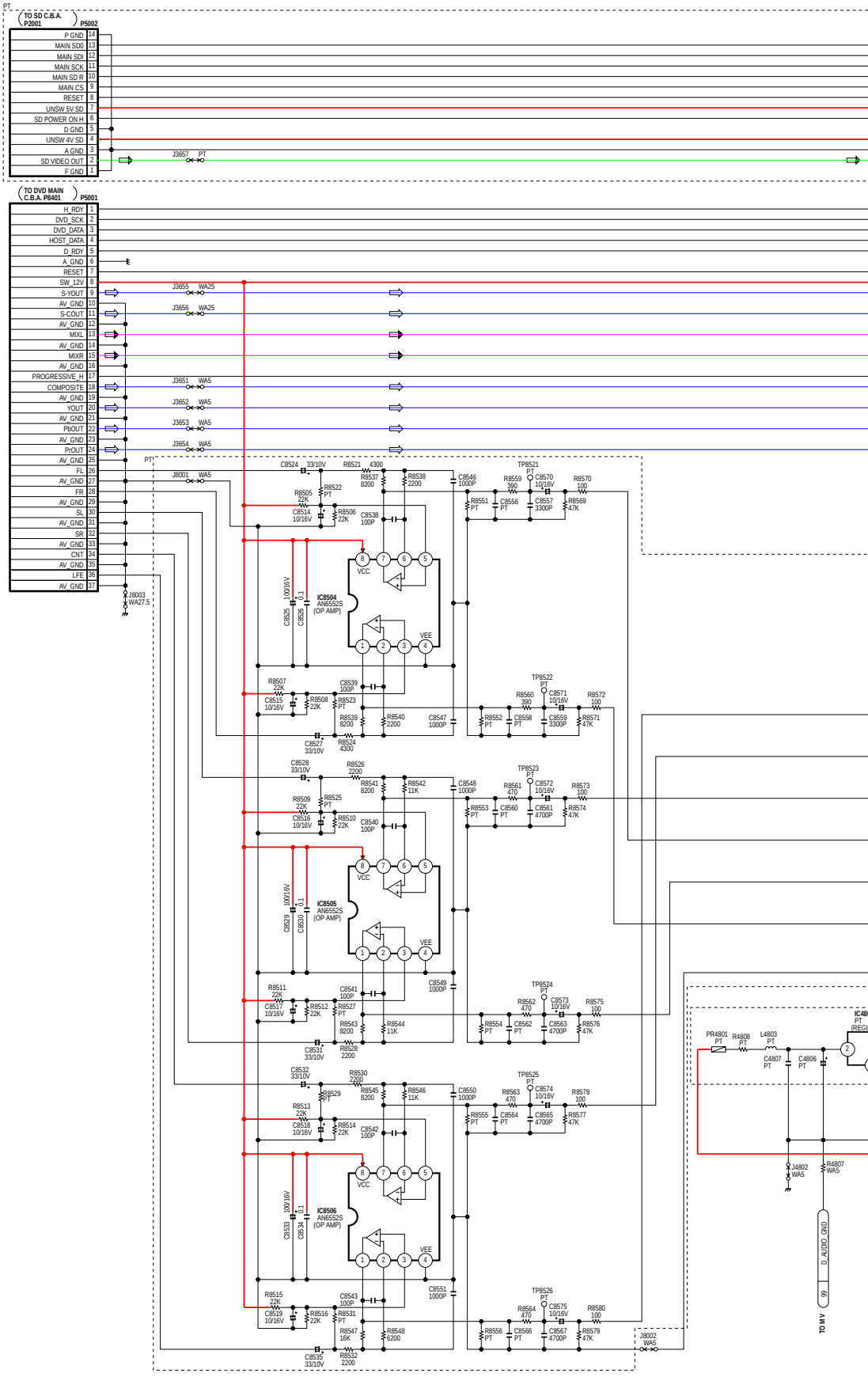
SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW8952	K0L1BA000015	SWITCH PUSH	
SW8953	K0L1BA000014	SWITCH PUSH	

12. SCHEMATIC DIAGRAMS FOR PRINTING WITH LETTER SIZE

MAIN VI (5.1ch AUDIO) SCHEMATIC DIAGRAM

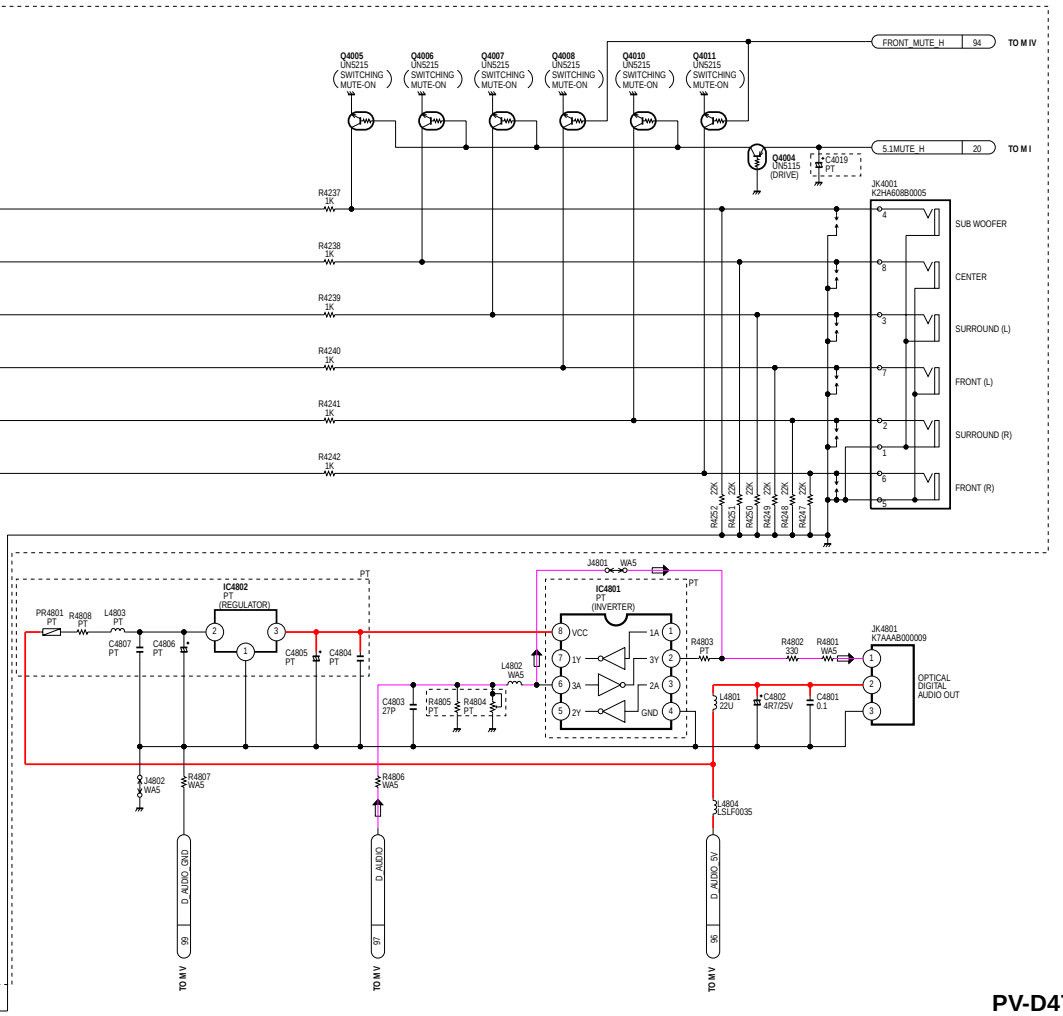
NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

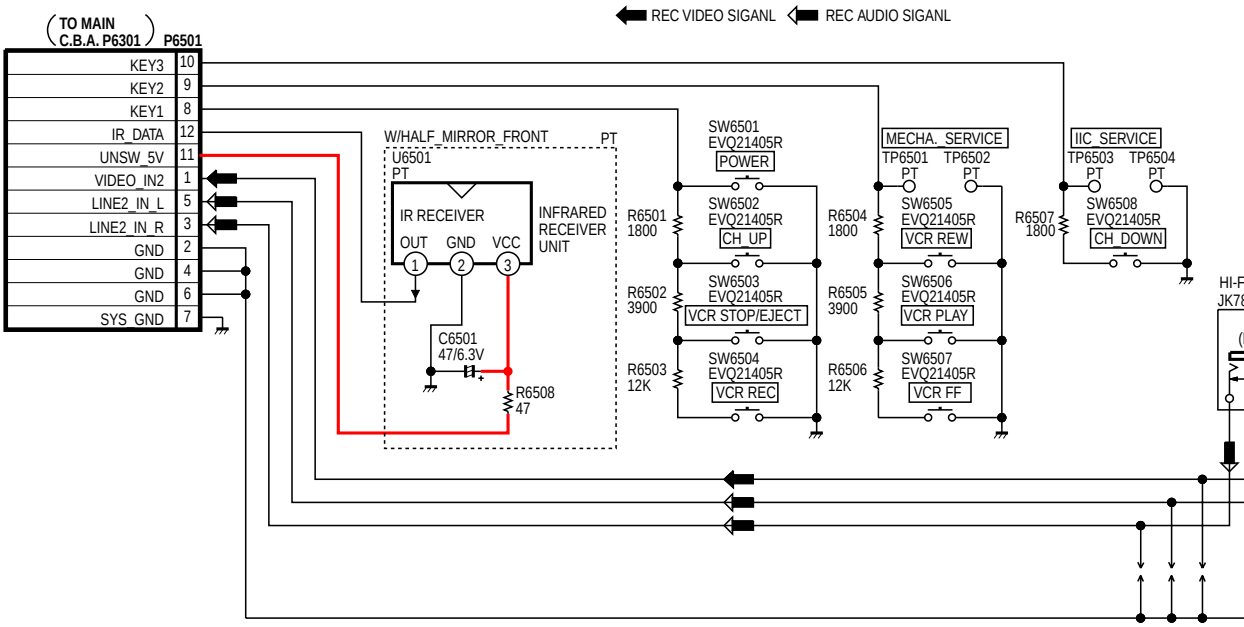


LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN VI (5.1ch AUDIO) SCHEMATIC DIAGRAM

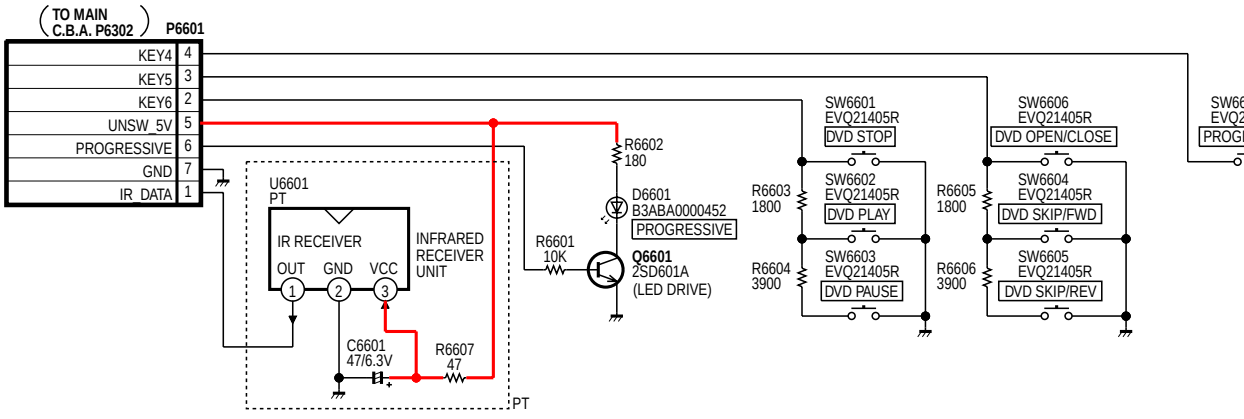
7.3. OPERATION I/OPERATION II SCHEMATIC DIAGRAMS

OPERATION I SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.



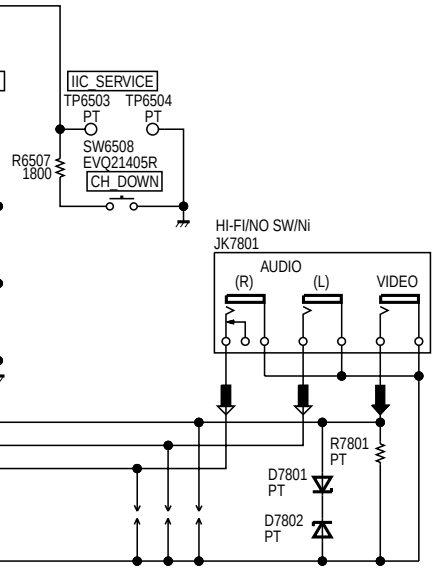
OPERATION II SCHEMATIC DIAGRAM



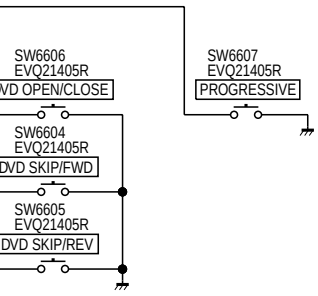
RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



LSJB2092



LSJB2093

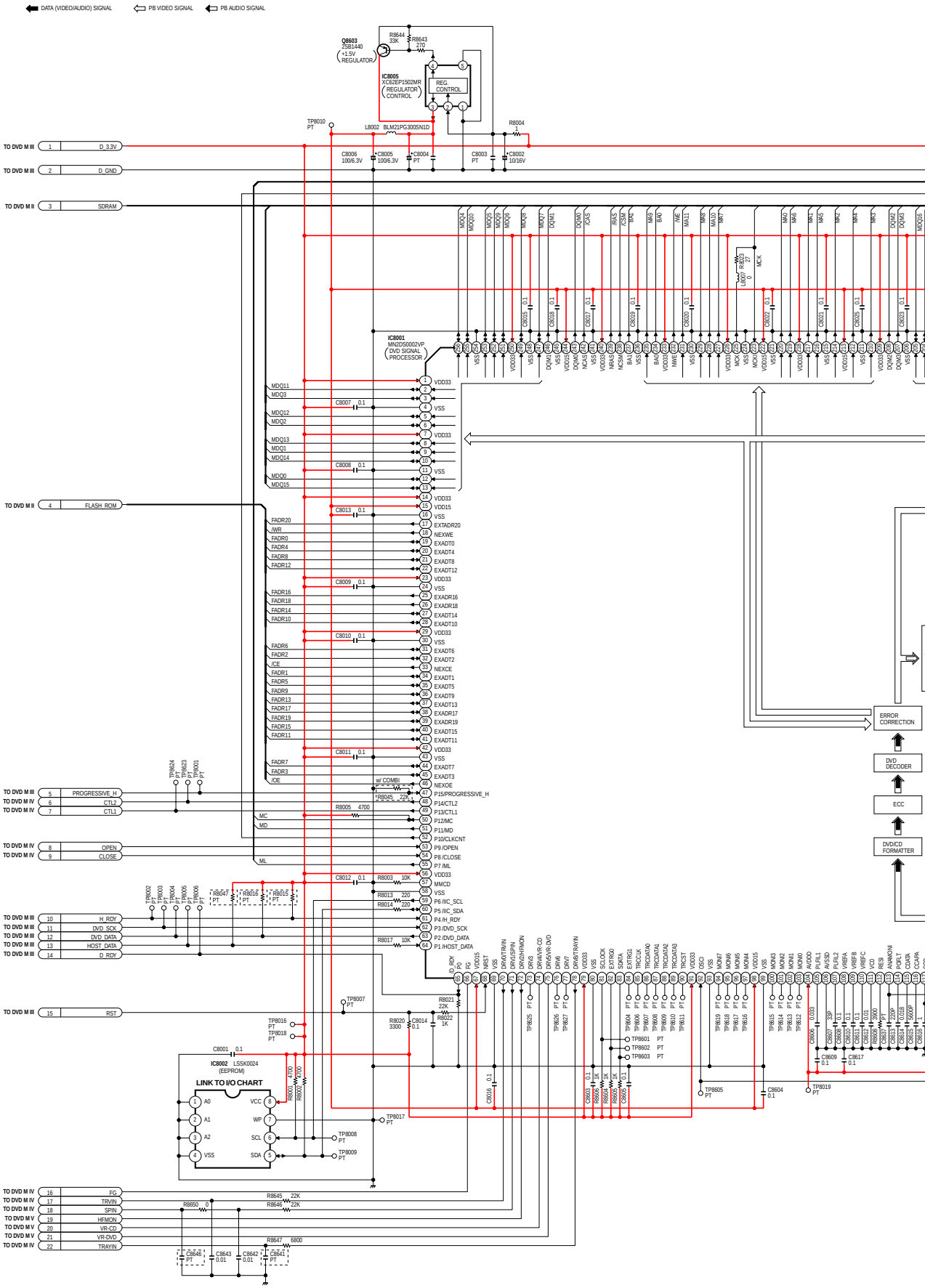
LINK TO VOLTAGE CHART

PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
OPERATION I & OPERATION II SCHEMATIC DIAGRAM

7.4. DVD MAIN SCHEMATIC DIAGRAMS

DVD MAIN I SCHEMATIC DIAGRAM

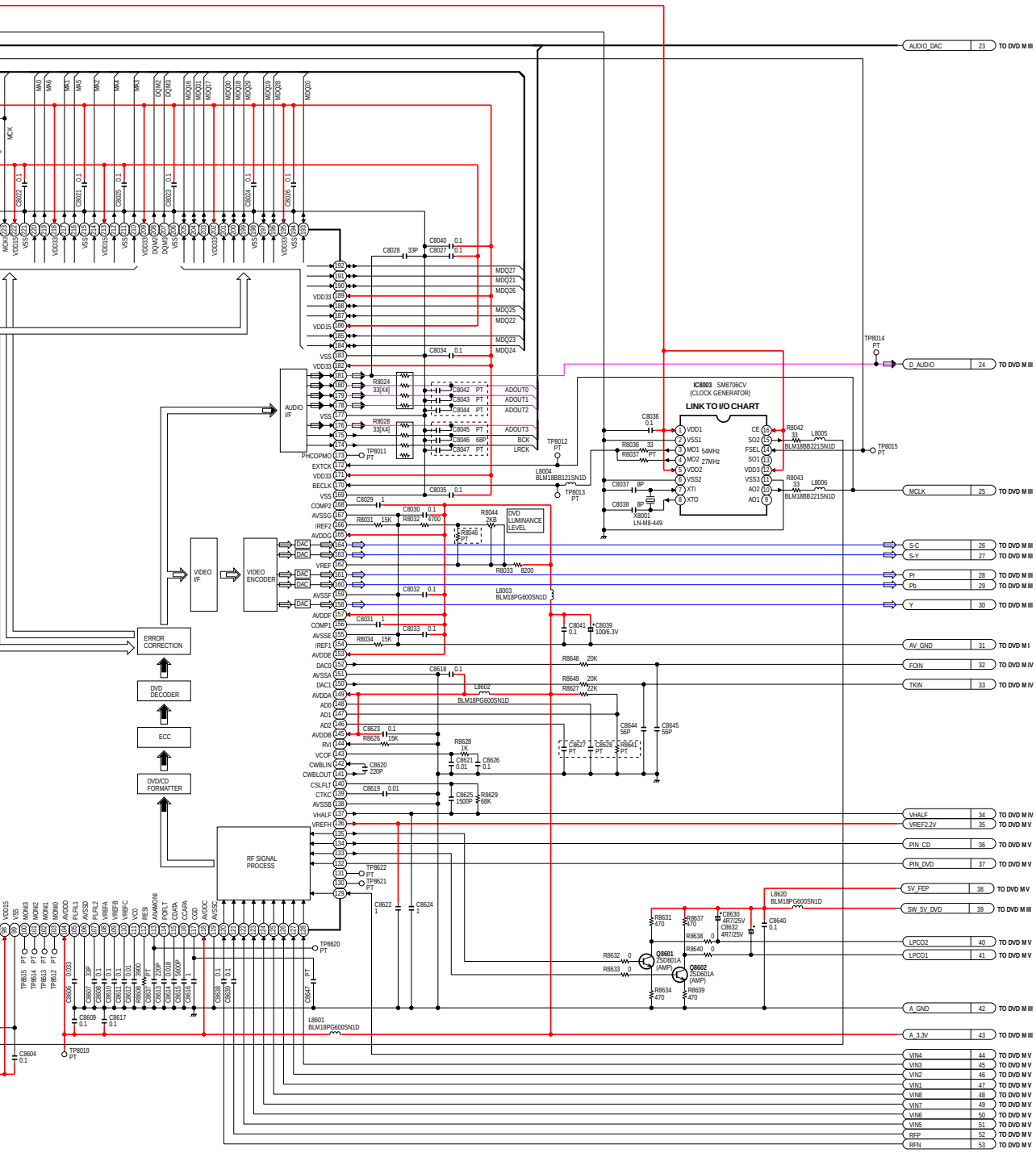
NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

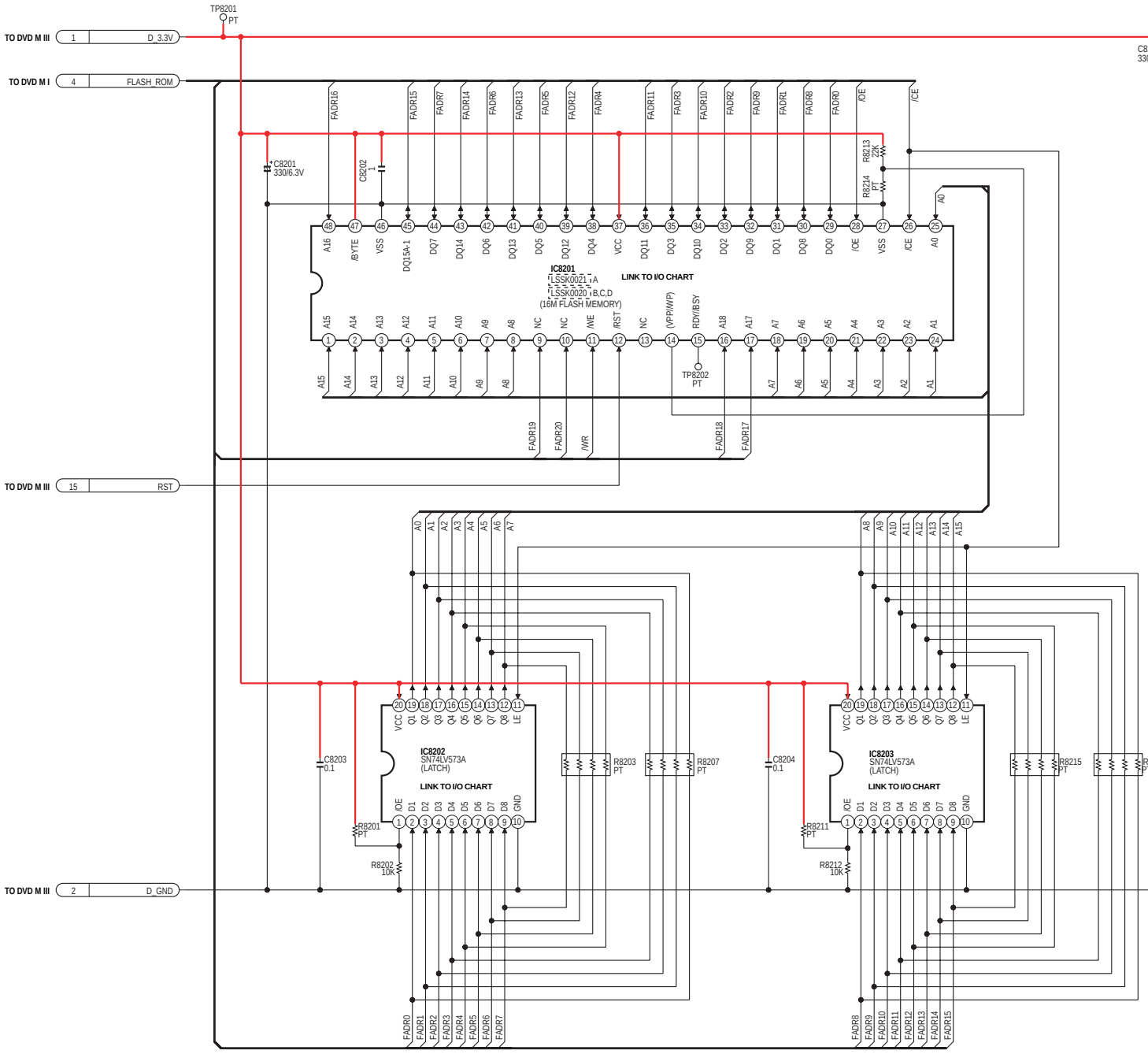
NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN I SCHEMATIC DIAGRAM

DVD MAIN II SCHEMATIC DIAGRAM

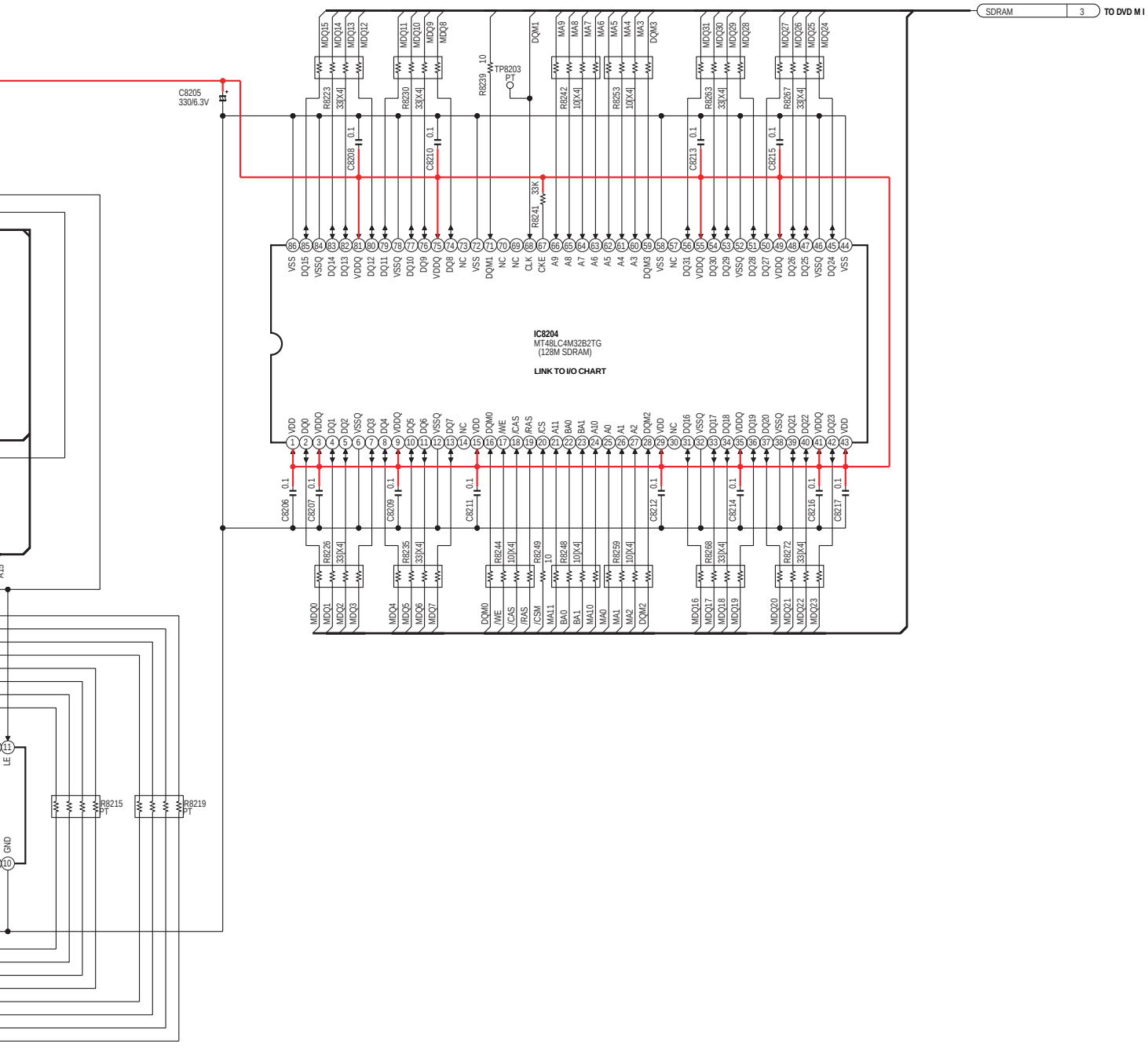


NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT

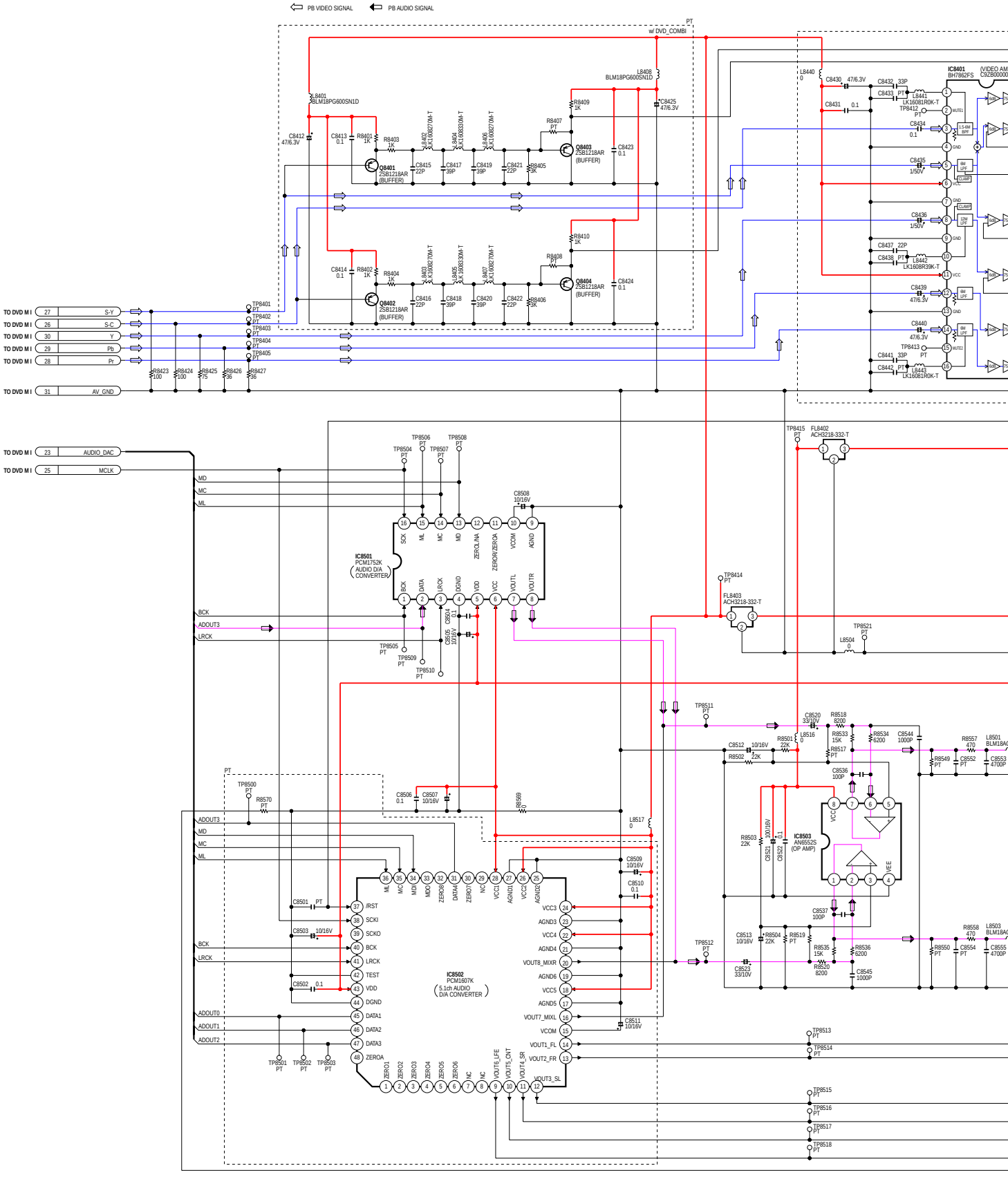


LINK TO VOLTAGE CHART

LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN II SCHEMATIC DIAGRAM

DVD MAIN III SCHEMATIC DIAGRAM

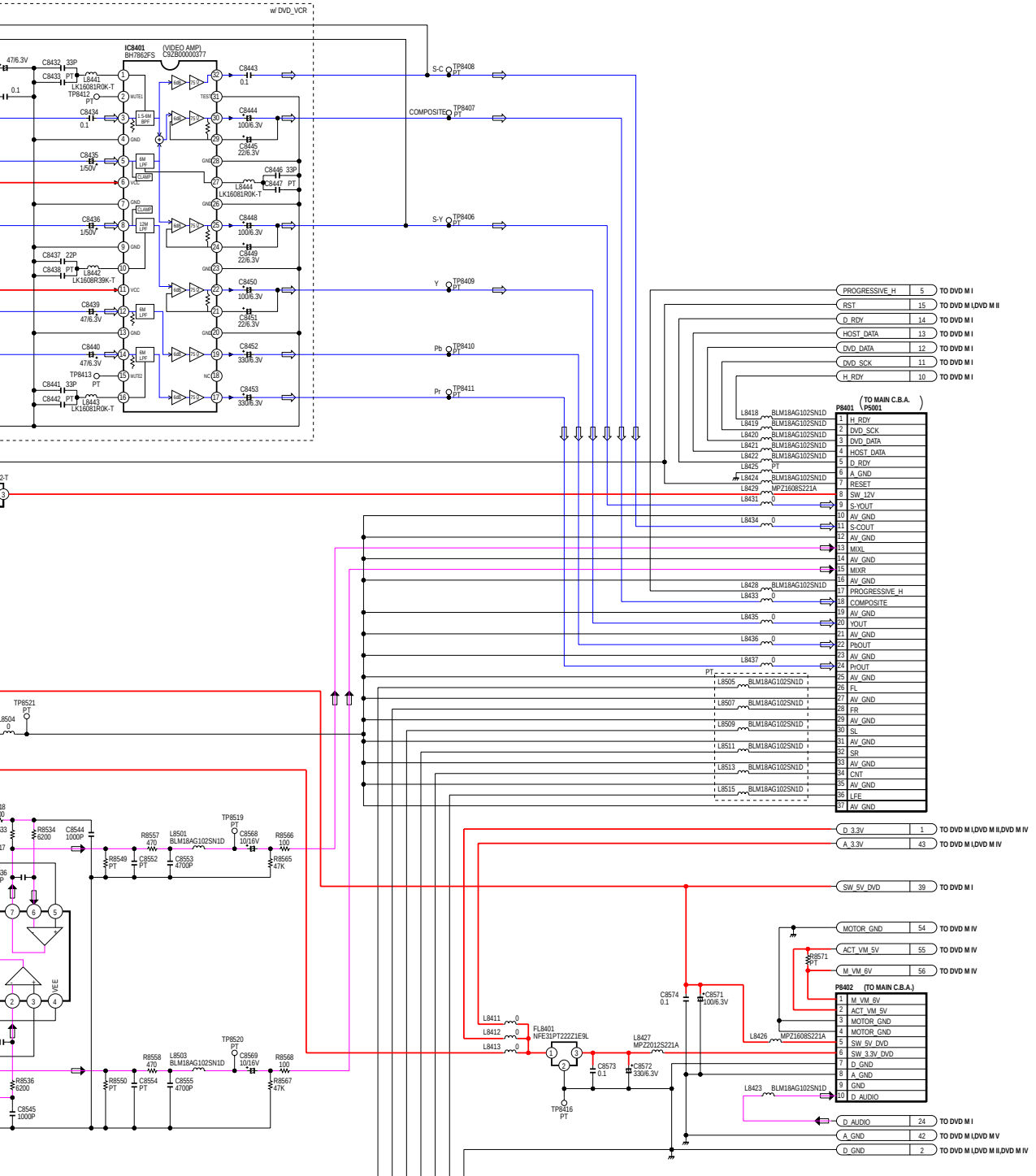
NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

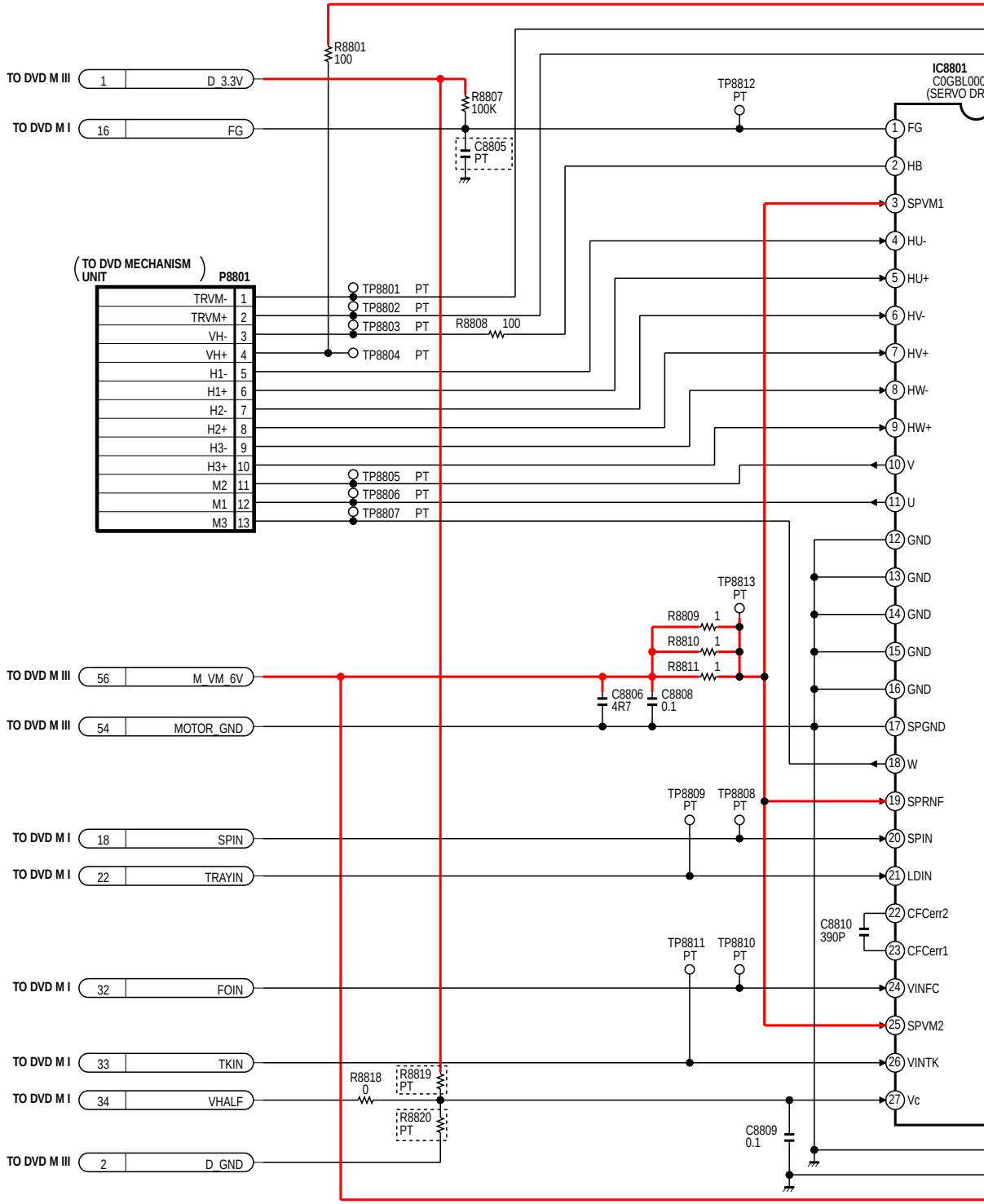


LINK TO VOLTAGE CHART

LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN III SCHEMATIC DIAGRAM

DVD MAIN IV SCHEMATIC DIAGRAM

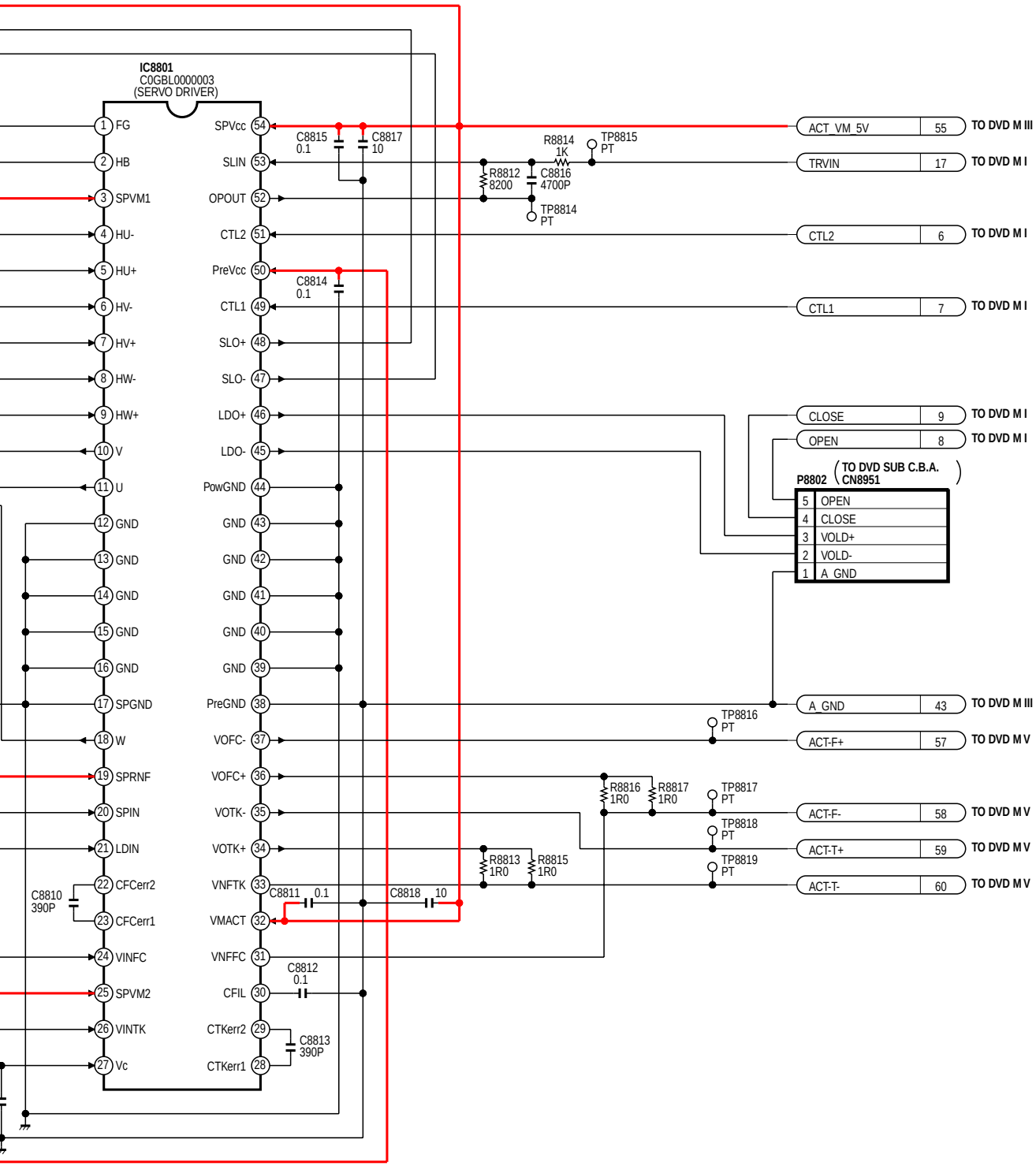
NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

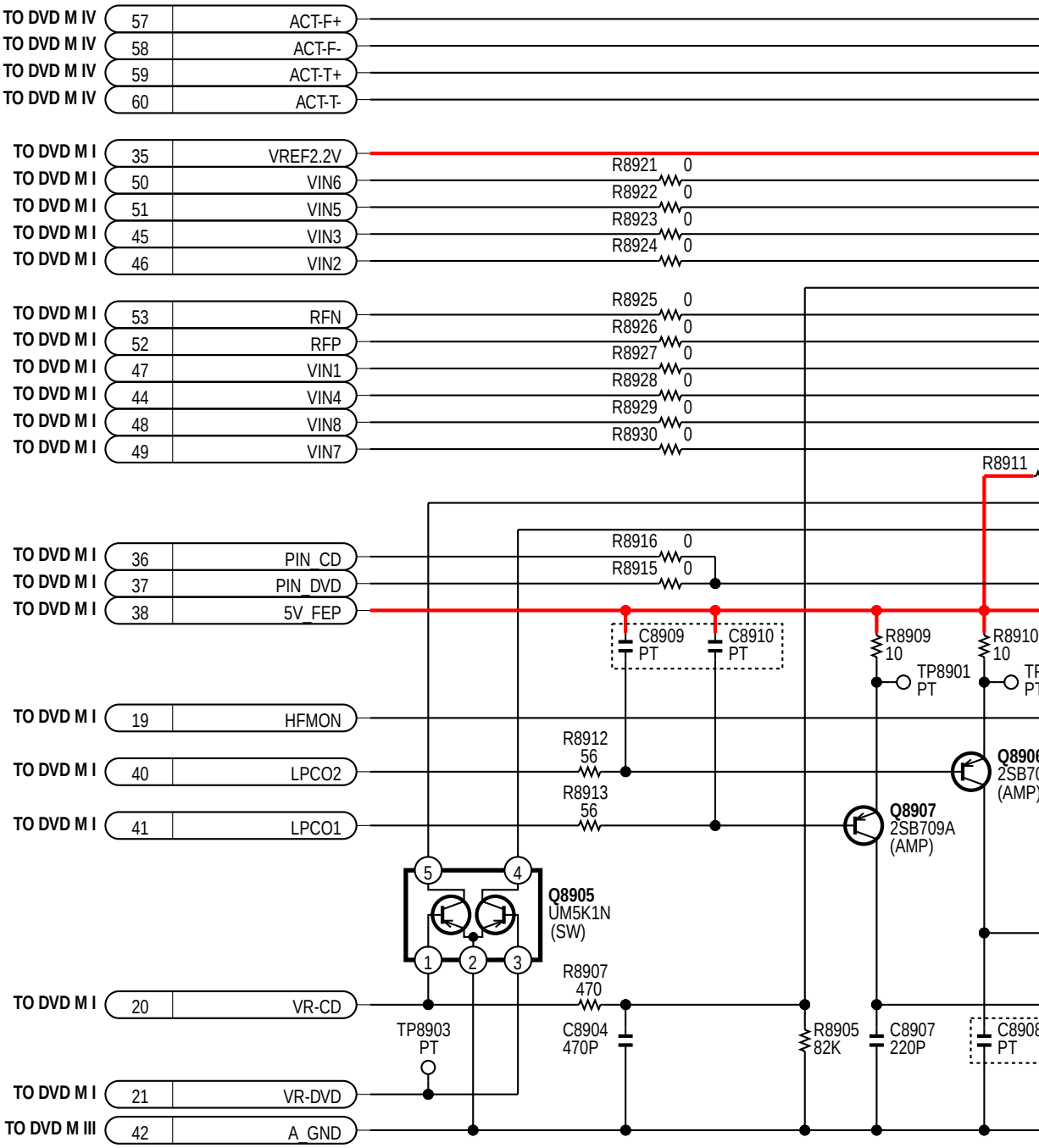


LINK TO VOLTAGE CHART

LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN IV SCHEMATIC DIAGRAM

DVD MAIN V SCHEMATIC DIAGRAM

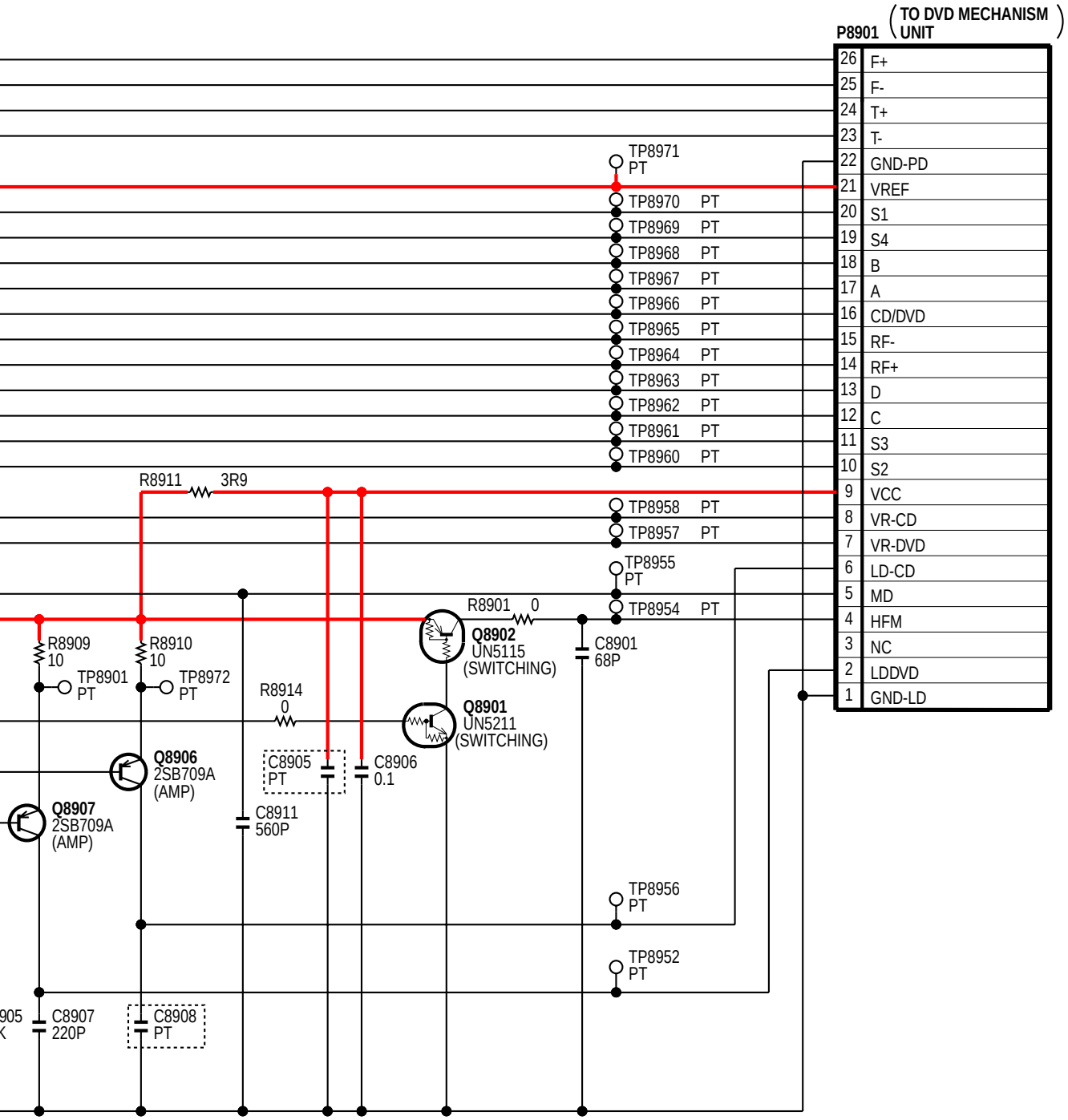
NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



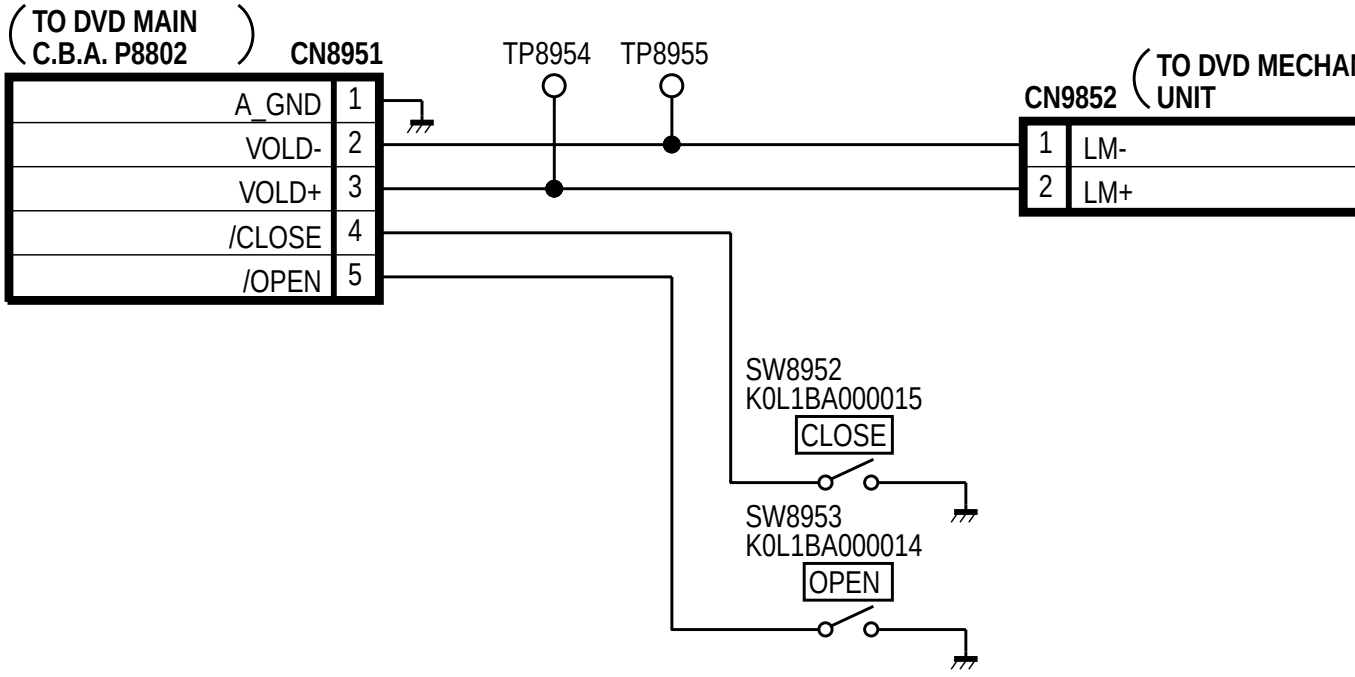
LINK TO VOLTAGE CHART

LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN V SCHEMATIC DIAGRAM

7.5. DVD SUB SCHEMATIC DIAGRAM

DVD SUB SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

TO DVD MECHANISM UNIT

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LINK TO VOLTAGE CHART

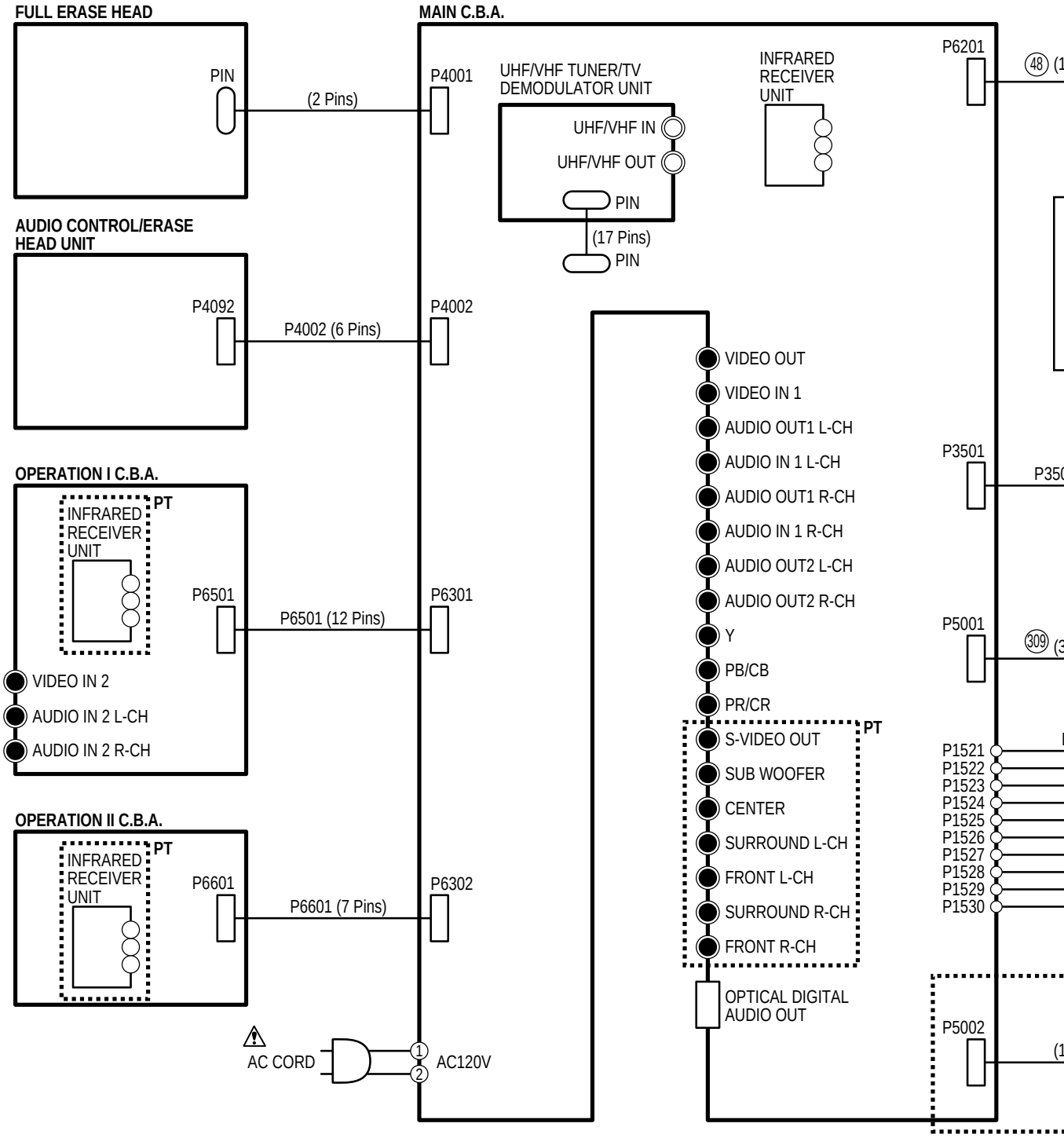
LSJB2014
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD SUB SCHEMATIC DIAGRAM

7.6. INTERCONNECTION SCHEMATIC DIAGRAM

INTERCONNECTION SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

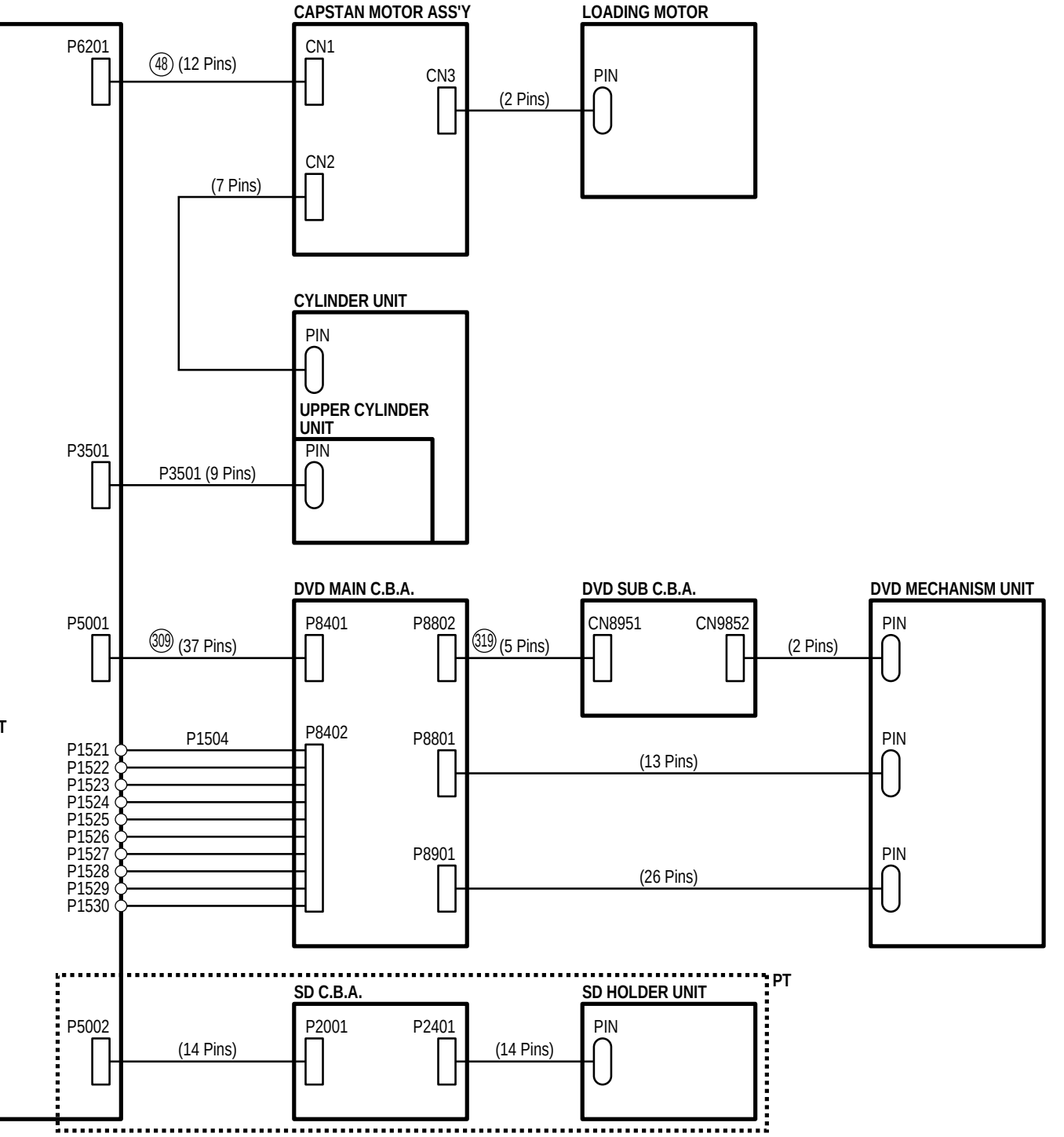
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.



RKED "PT" ARE NOT USED.

△ HAVE
OR SAFETY.
NENTS,

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

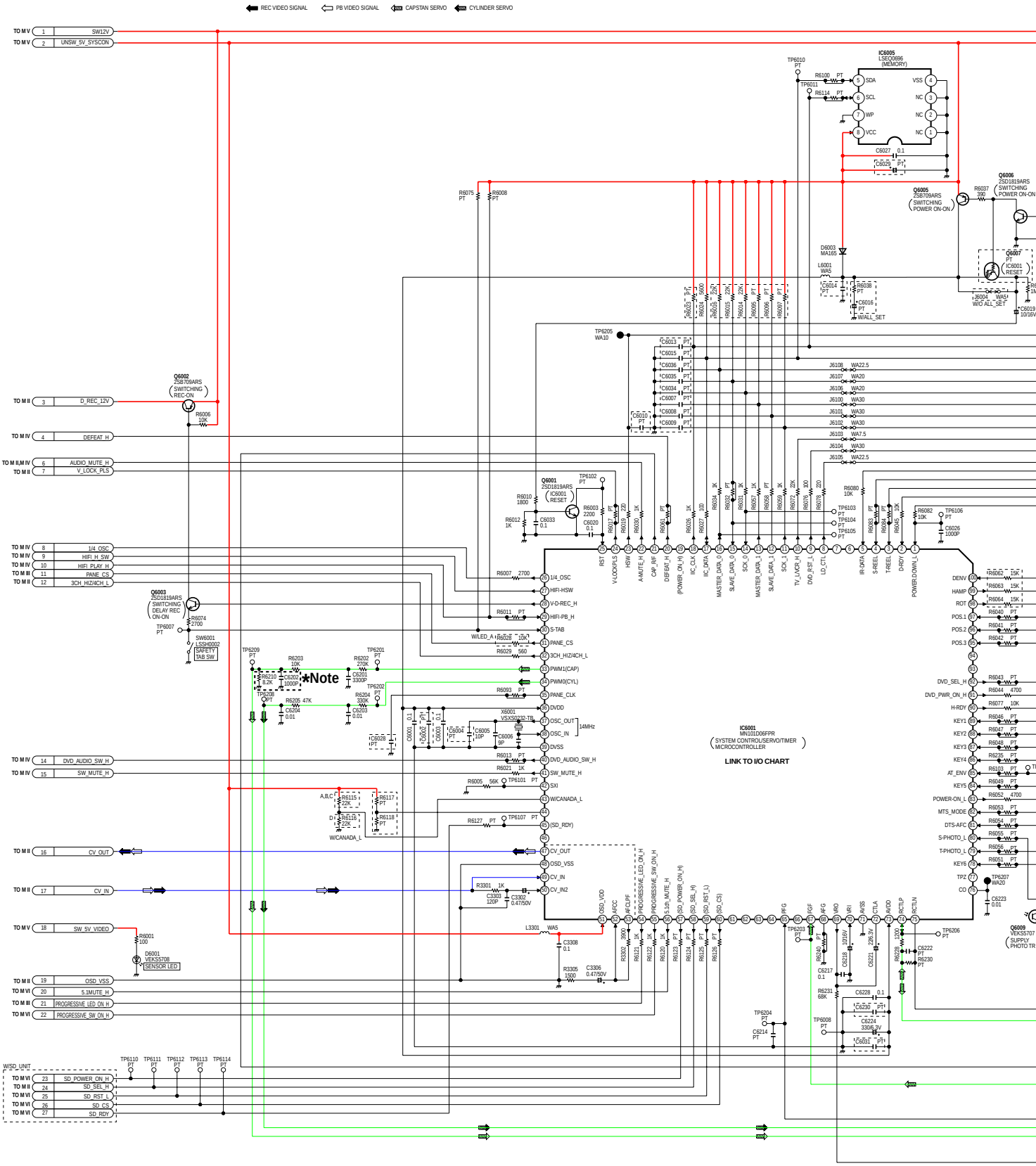


PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
INTERCONNECTION SCHEMATIC DIAGRAM

7.2. MAIN SCHEMATIC DIAGRAMS

MAIN I (SYSTEM CONTROL/ SERVO) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT

KEY VOLTAGE CHART (SW6501～6508, 6601～6607)

TERMINAL VOLTAGE	0V～0.6V	0.7V～1.9V	2.0V～3.1V	3.2V～4.4V
KEY DATA1 (PIN 89)	POWER	CH UP	VCR STOP/EJECT	VCR REC
KEY DATA2 (PIN 88)	-----	VCR REW	VCR PLAY	VCR FF
KEY DATA3 (PIN 87)	-----	CH DOWN	-----	-----
KEY DATA4 (PIN 86)	PRO-GRESSIVE	-----	-----	-----
KEY DATA5 (PIN 84)	DVD OPEN/CLOSE	DVD SKIP/FWD	DVD SKIP/REW	-----
KEY DATA6 (PIN 78)	DVD STOP	DVD PLAY	DVD PAUSE	-----

***Note**

R6210 and C6202 replacement note for the models PV-D4733S, PV-D4743, and PV-D4743S:
Early units of the models PV-D4733S, PV-D4743, and PV-D4743S use a Main C.B.A. with suffix version number LSJB2082-1 which employs two different specifications as shown below.

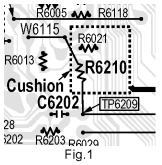


Fig.1

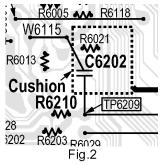


Fig.2

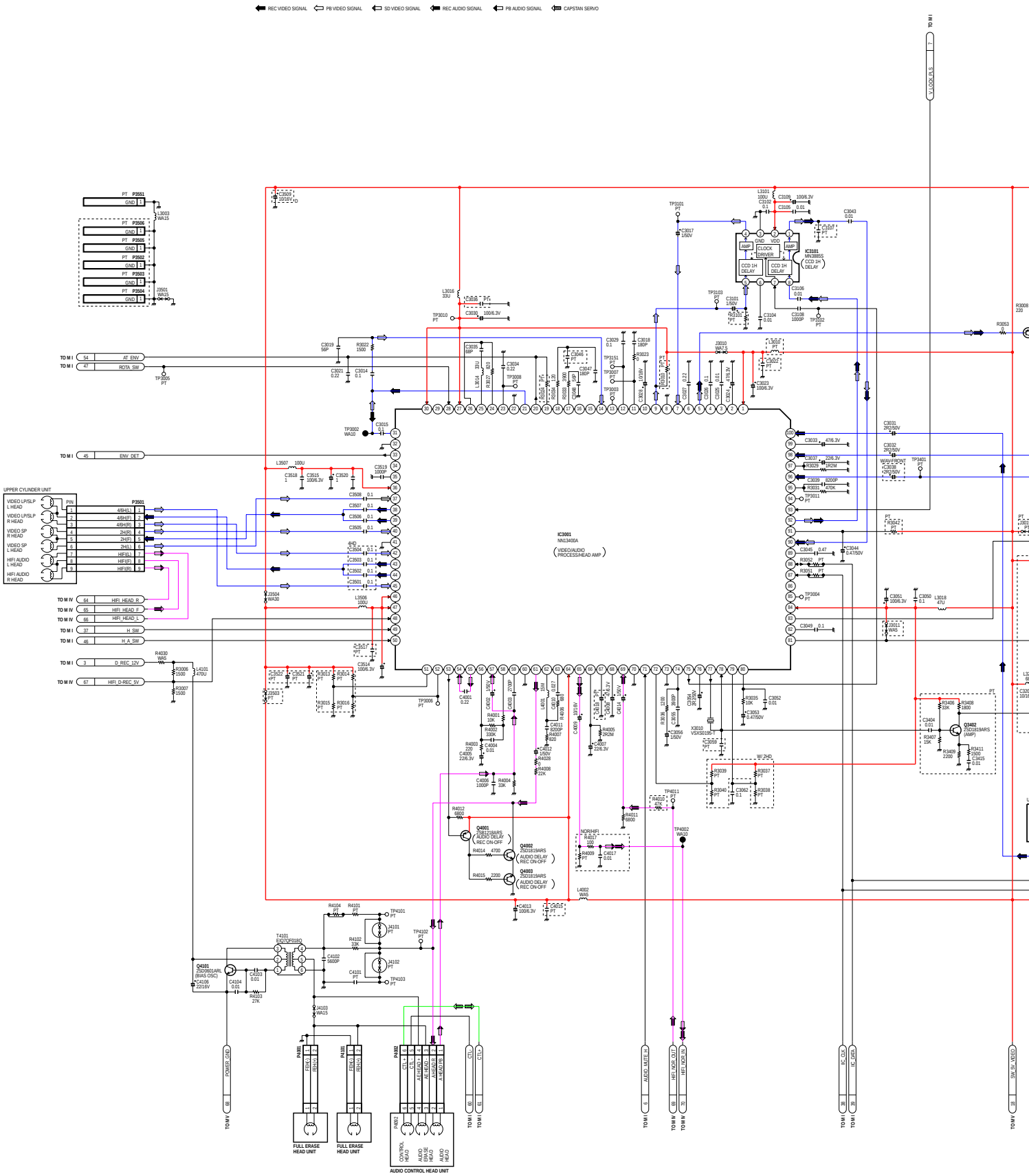
When replacing R6210 or C6202 on Main C.B.A. with suffix version number LSJB2082-1, order the RESISTOR KIT (LSUC0015), then replace both R6210 and C6202 at the same time as shown in Fig.2.
The RESISTOR KIT (LSUC0015) consists of R6210 (ERJ6GEYJ825V), C6202 (ECKR1H102KB5), and a cushion (VMTS0059).

LINK TO VOLTAGE CHART

LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN I (SYSTEM CONTROL/SERVO) SCHEMATIC DIAGRAM

MAIN II (SIGNAL PROCESS/AUDIO) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.



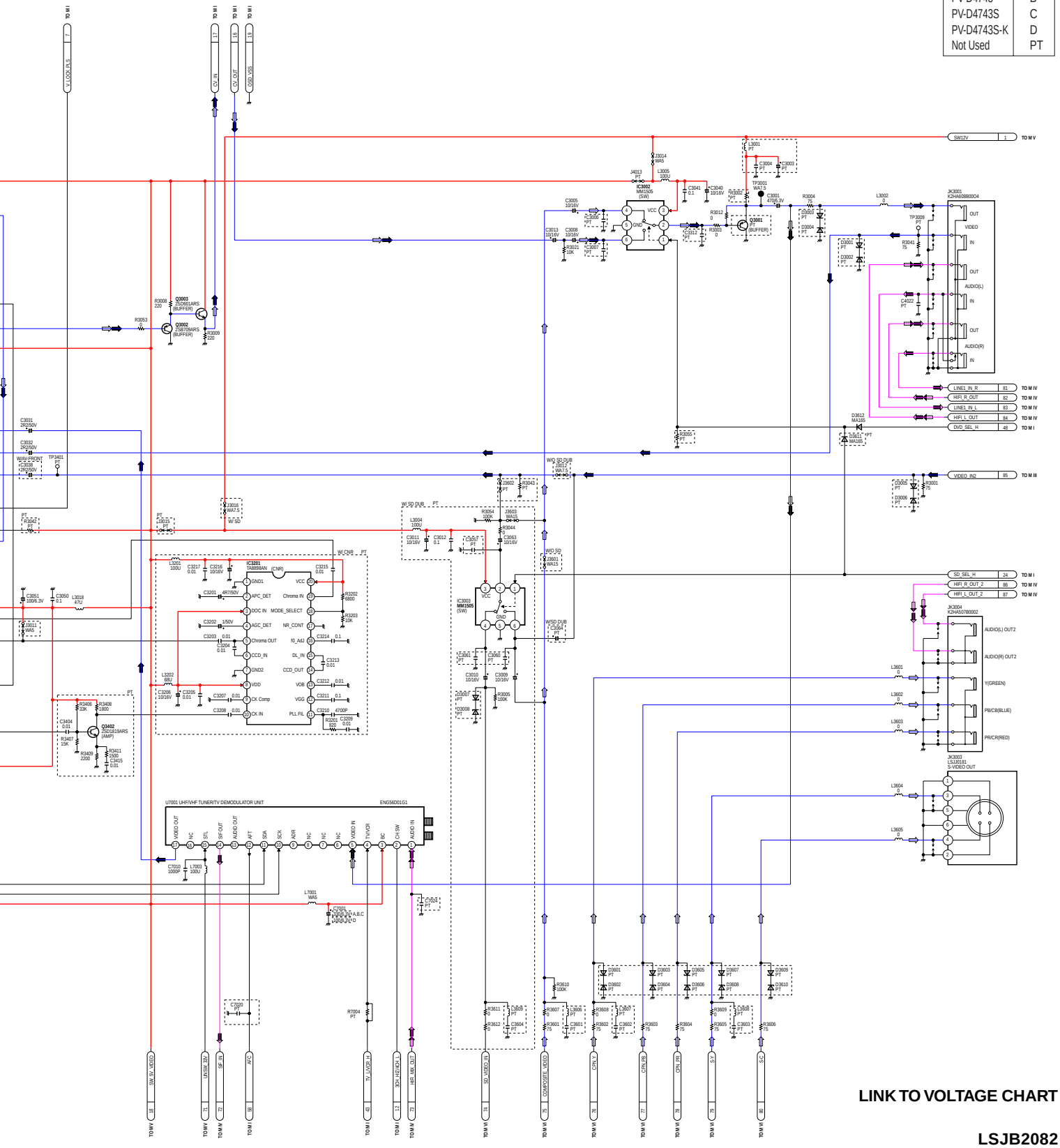
RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT

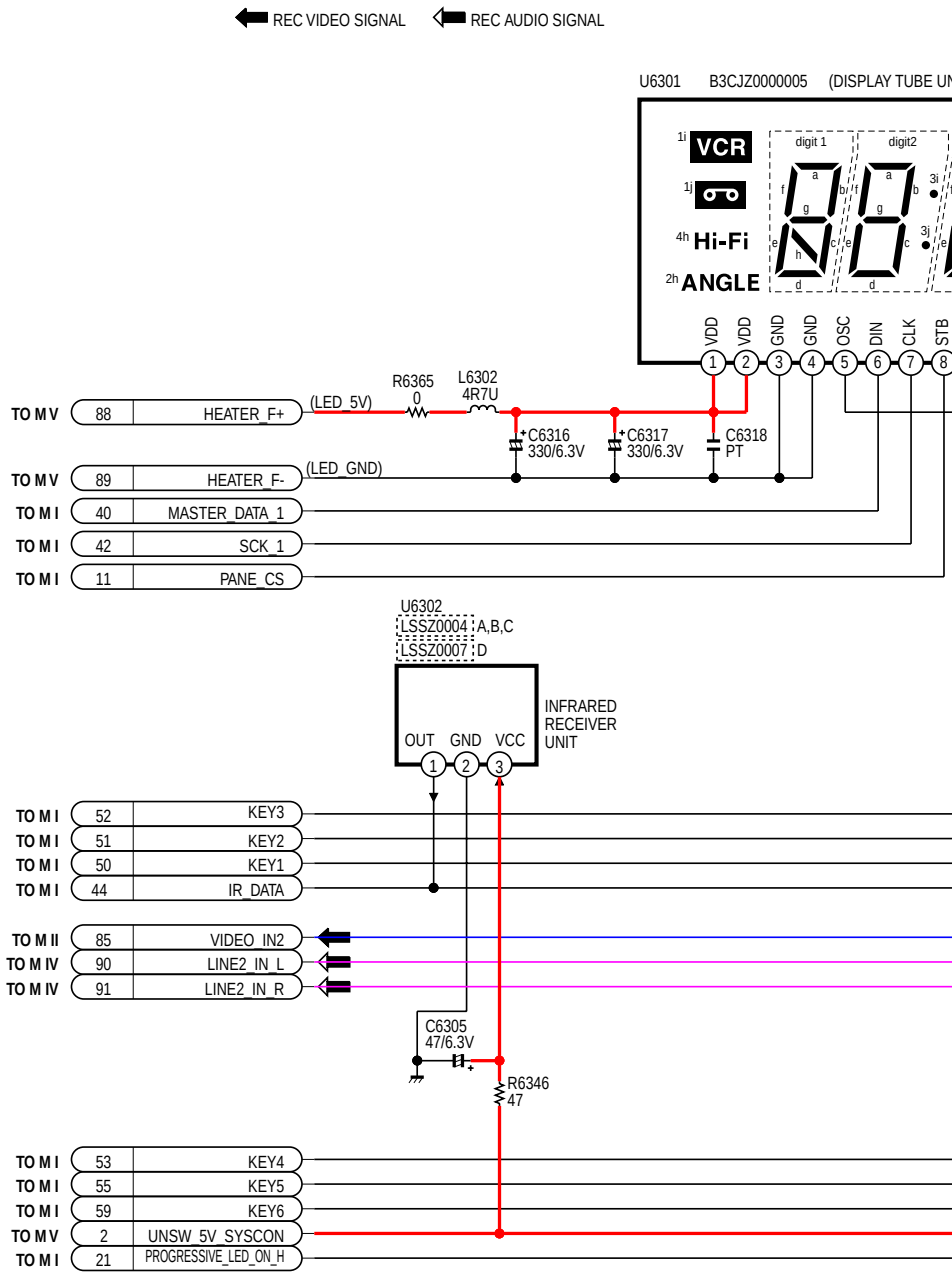


LINK TO VOLTAGE CHART

LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN II (SIGNAL PROCESS/ AUDIO) SCHEMATIC DIAGRAM

MAIN III (OPERATION) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

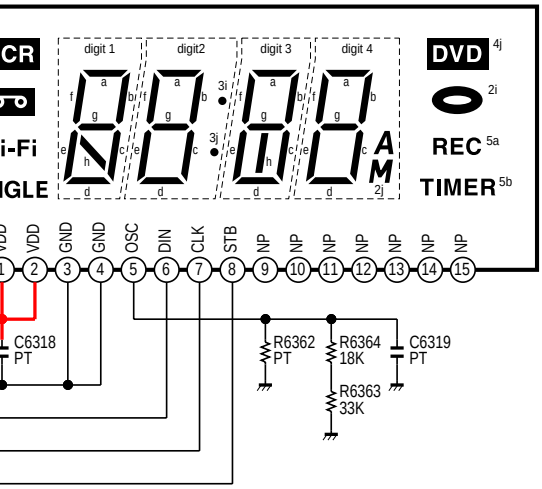
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

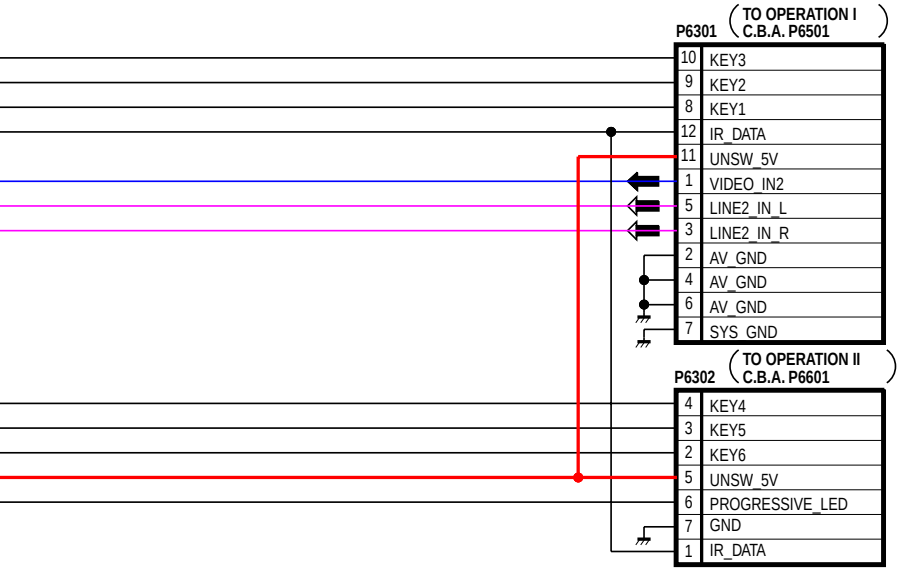
NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT

B3CJZ0000005 (DISPLAY TUBE UNIT)

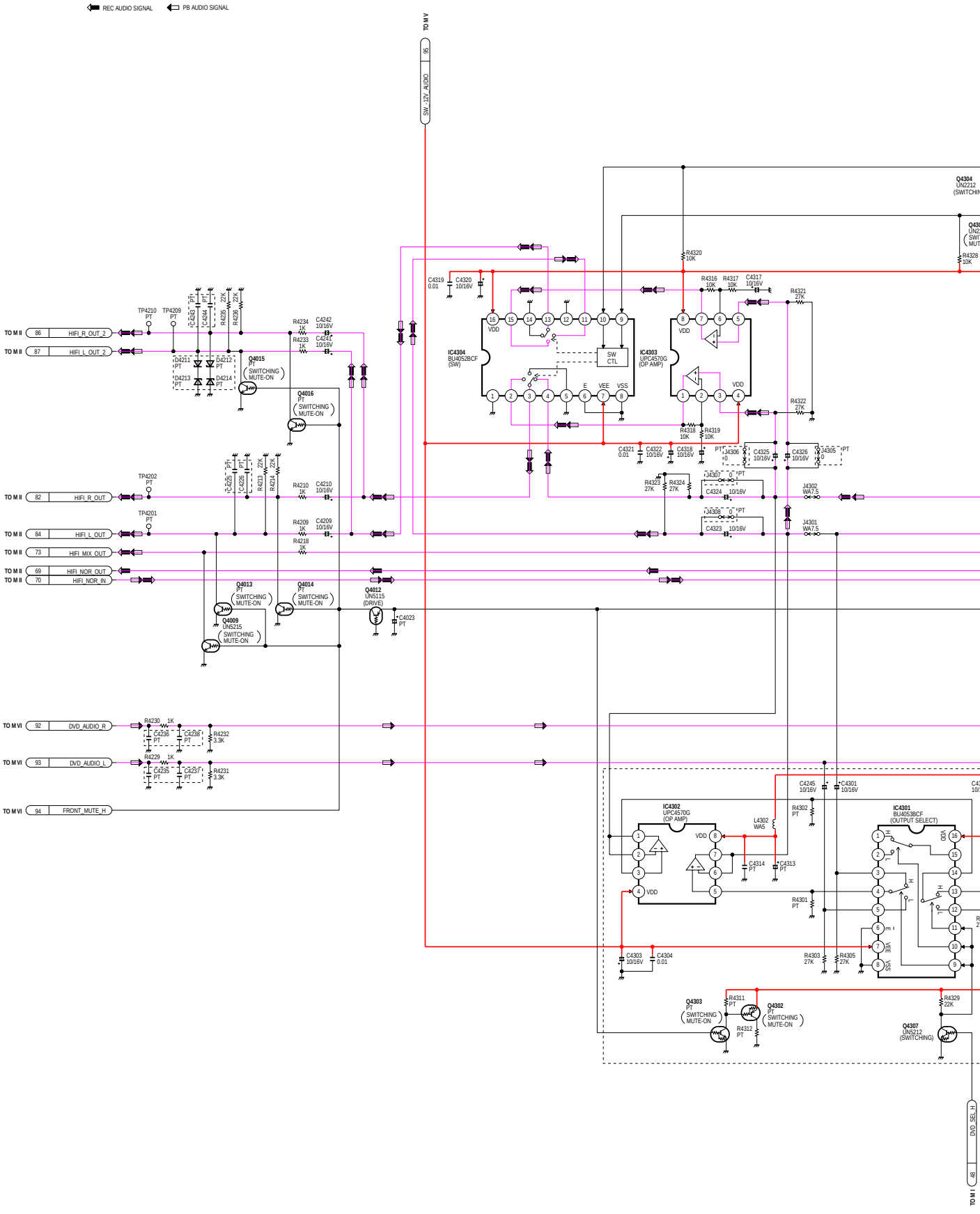




LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN III (OPERATION) SCHEMATIC DIAGRAM

MAIN IV (Hi-Fi) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.



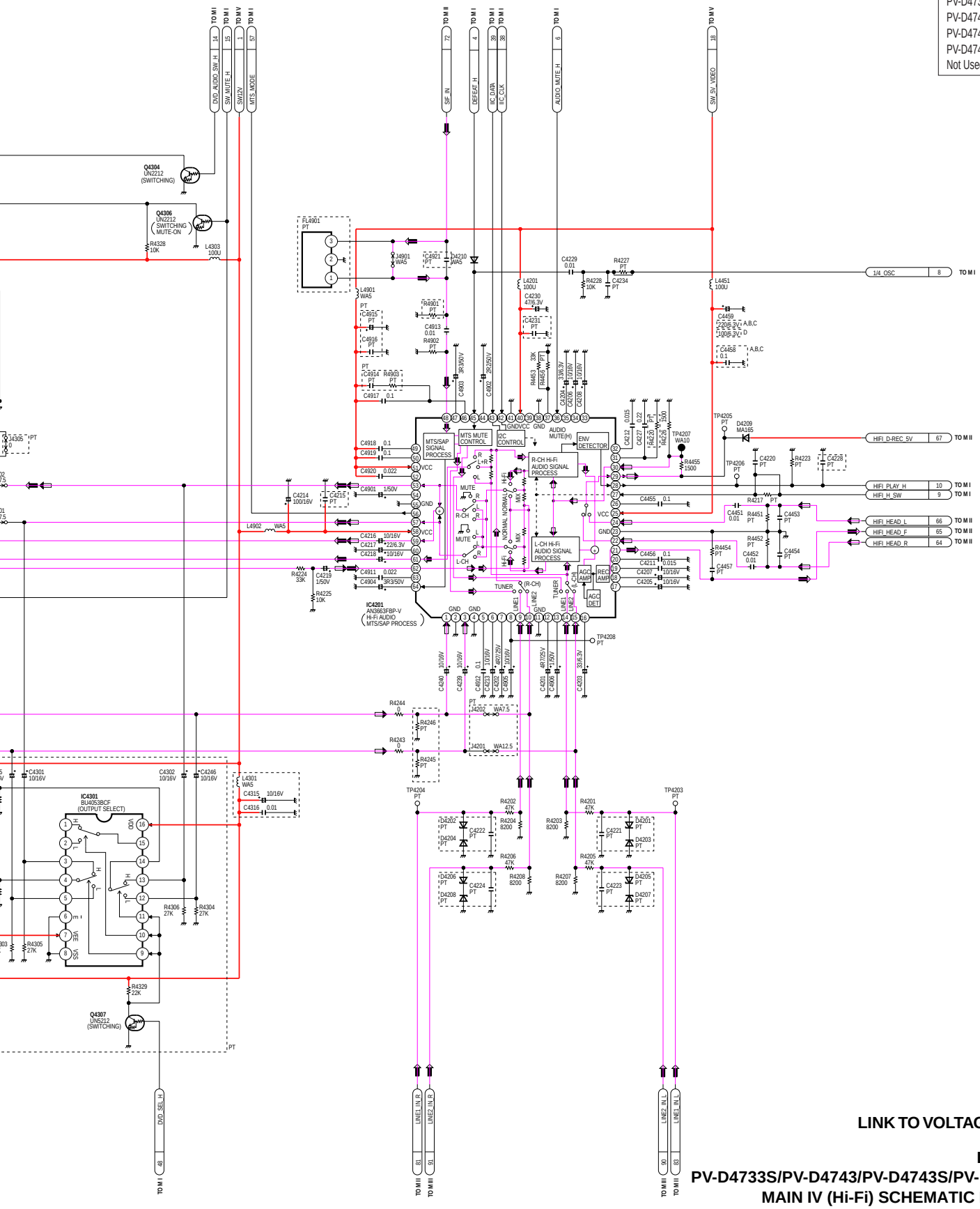
RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT



LINK TO VOLTAGE CHART

LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN IV (Hi-Fi) SCHEMATIC DIAGRAM

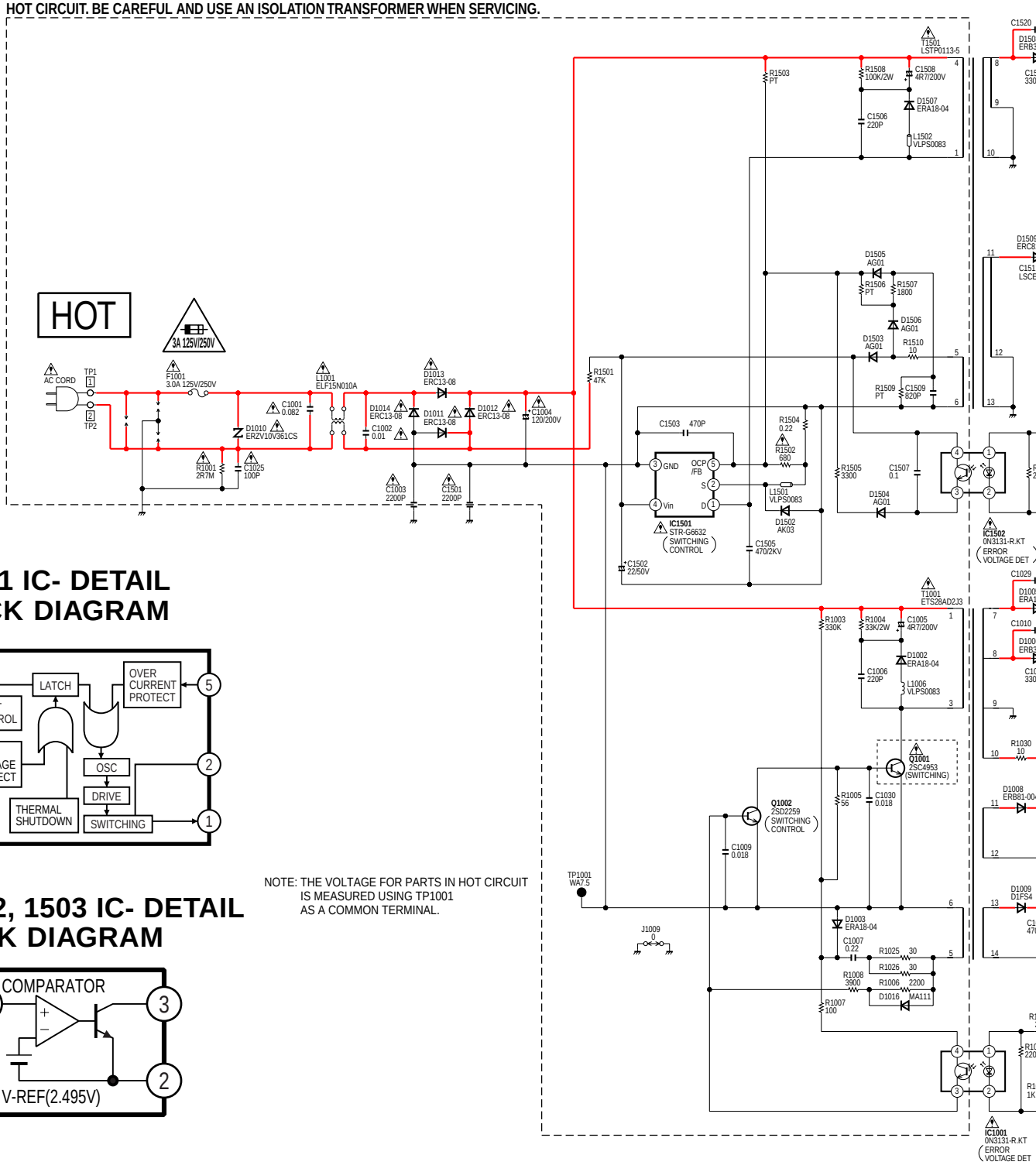
MAIN V (POWER SUPPLY) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME
TYPE 3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.



IC1501 IC- DETAIL BLOCK DIAGRAM

IC1002, 1503 IC- DETAIL BLOCK DIAGRAM

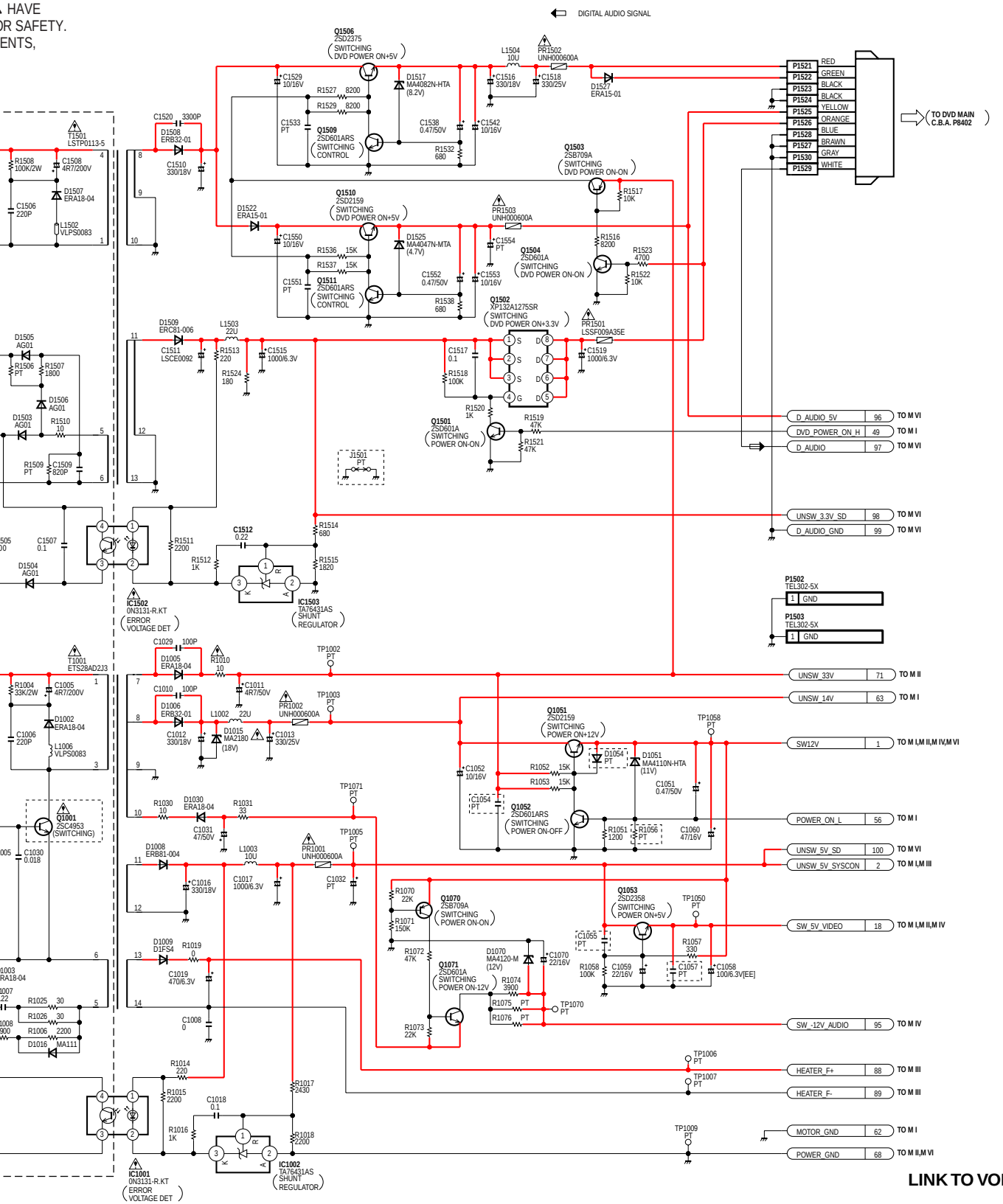
NOTE: THE VOLTAGE FOR PARTS IN HOT CIRCUIT
IS MEASURED USING TP1001
AS A COMMON TERMINAL.

RKED "PT" ARE NOT USED.

A HAVE
OR SAFETY.
ENTS,

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

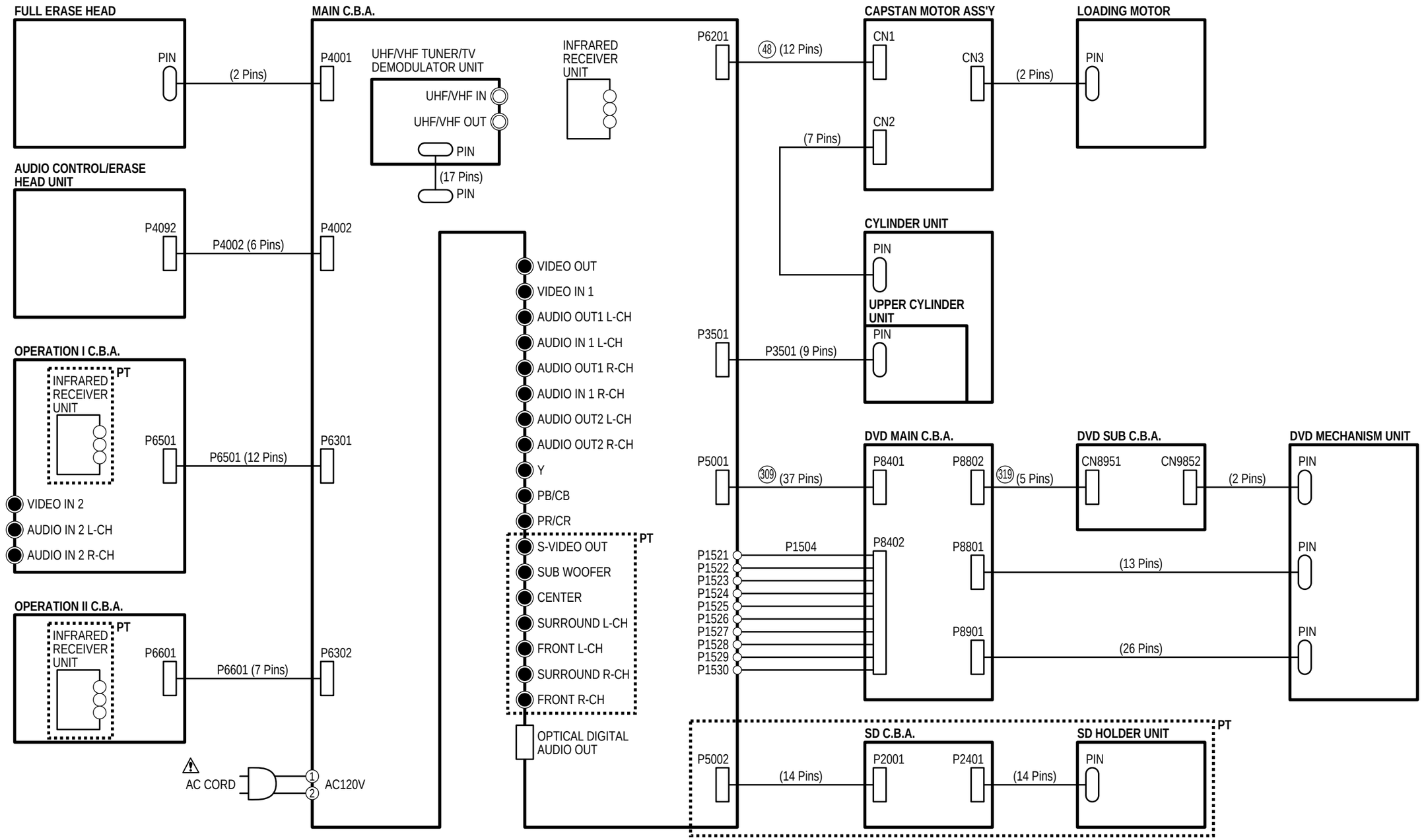
LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN V (POWER SUPPLY) SCHEMATIC DIAGRAM

INTERCONNECTION SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

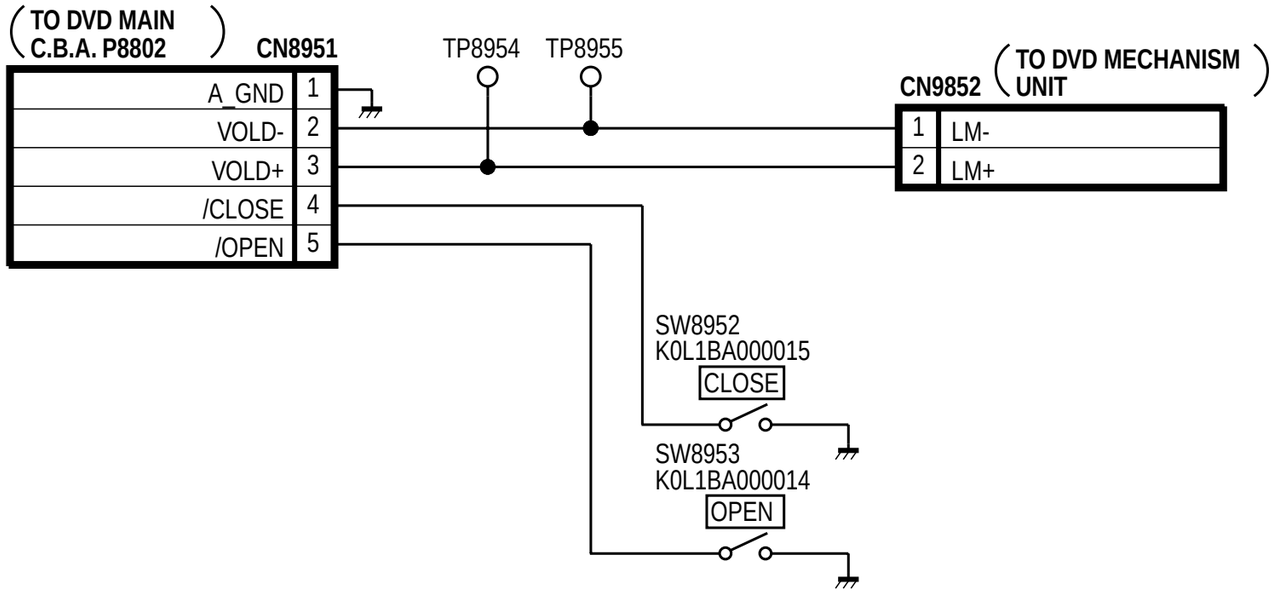


DVD SUB SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2014
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD SUB SCHEMATIC DIAGRAM

DVD MAIN I SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

DATA (VIDEO/AUDIO) SIGNAL
PB VIDEO SIGNAL
PB AUDIO SIGNAL

Q8603 2SB1440 (+1.5V REGULATOR)
R8644 33K
R8643 270
IC8005 XC62EP1502MR (REGULATOR CONTROL)
REG. CONTROL
TP8010 PT
L8002 BLM21PG300SN1D
R8004
C8006 100/6.3V
C8005 100/6.3V
C8004 PT
C8003 PT
C8002 33/16V

TO DVD M III 1 D_3.3V
TO DVD M III 2 D_GND
TO DVD M II 3 SDRAM
TO DVD M II 4 FLASH_ROM
TO DVD M III 5 PROGRESSIVE_H
TO DVD M IV 6 CTL2
TO DVD M IV 7 CTL1
TO DVD M IV 8 OPEN
TO DVD M IV 9 CLOSE
TO DVD M III 10 H_RDY
TO DVD M III 11 DVD_SCK
TO DVD M III 12 DVD_DATA
TO DVD M III 13 HOST_DATA
TO DVD M III 14 D_RDY
TO DVD M III 15 RST
TO DVD M IV 16 FG
TO DVD M IV 17 TRVIN
TO DVD M IV 18 SPIN
TO DVD M V 19 HFMON
TO DVD M V 20 VR-CD
TO DVD M V 21 VR-DVD
TO DVD M IV 22 TRAYIN

IC8001 MN2DS0002VP (DVD SIGNAL PROCESSOR)

IC8002 LSSK0024 (EEPROM)
LINK TO I/O CHART

IC8003 SM8706CV (CLOCK GENERATOR)
LINK TO I/O CHART

AUDIO I/F
VIDEO I/F
VIDEO ENCODER
ERROR CORRECTION
DVD DECODER
ECC
DVD/CD FORMATTER
RF SIGNAL PROCESS

DVD LUMINANCE LEVEL

TO DVD M III AUDIO_DAC 23
TO DVD M III D_AUDIO 24
TO DVD M III MCLK 25
TO DVD M III S-C 26
TO DVD M III S-Y 27
TO DVD M III Pr 28
TO DVD M III Pb 29
TO DVD M III Y 30
TO DVD M I AV_GND 31
TO DVD M IV FOIN 32
TO DVD M IV TKIN 33
TO DVD M IV VHALF 34
TO DVD M V VREF2.2V 35
TO DVD M V PIN_CD 36
TO DVD M V PIN_DVD 37
TO DVD M V 5V_FEP 38
TO DVD M III SW_5V_DVD 39
TO DVD M V LPCO2 40
TO DVD M V LPCO1 41
TO DVD M III A_GND 42
TO DVD M III A_3.3V 43
TO DVD M V VIN4 44
TO DVD M V VIN3 45
TO DVD M V VIN2 46
TO DVD M V VIN1 47
TO DVD M V VIN8 48
TO DVD M V VIN7 49
TO DVD M V VIN6 50
TO DVD M V VIN5 51
TO DVD M V RFP 52
TO DVD M V RFN 53

LINK TO VOLTAGE CHART

LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN I SCHEMATIC DIAGRAM

I/O CHART OF IC8002

Pin No.	I/O	Signal Name	Description
1	-	A0	(Not used)
2	-	A1	(Not used)
3	-	A2	(Not used)
4	-	VSS	Ground
5	I/O	SDA	Serial data
6	I	SCL	Serial clock
7	-	WP	Write protect
8	I	VCC	+3.3V

I/O CHART OF IC8003

Pin No.	I/O	Signal Name	Description
1	I	VDD1	+3.3V
2	I	VSS1	Ground
3	I	MO1	54 MHz clock
4	I	MO2	27 MHz clock
5	I	VDD2	+3.3V
6	I	VSS2	Ground
7	I	XTI	Clock
8	I	XTO	Clock
9	I	AO1	(Not used)
10	I	AO2	768 fs output
11	I	VSS3	Ground
12	I	VDD3	+3.3V
13	-	SO1	(Not used)
14	-	FSEL	Frequency select (48 kHz : high / 44.1 kHz : low)
15	I	SO2	33.8688 MHz
16	I	CE	Chip enable : high

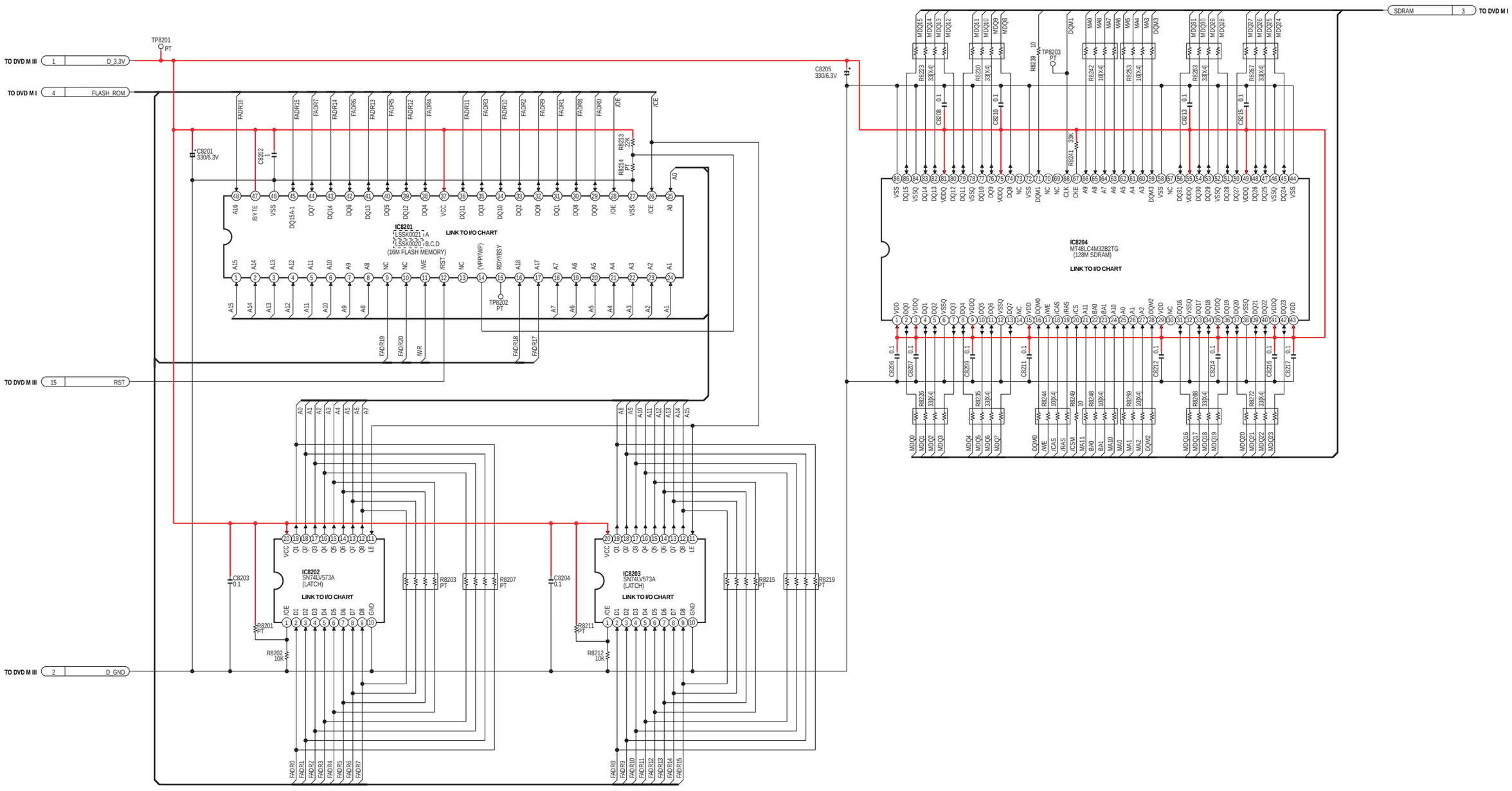
DVD MAIN II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT



LINK TO VOLTAGE CHART

LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN II SCHEMATIC DIAGRAM

I/O CHART OF IC8201

Pin No.	I/O	Signal Name	Description
1	I	A15	Memory address 16
2	I	A14	Memory address 15
3	I	A13	Memory address 14
4	I	A12	Memory address 13
5	I	A11	Memory address 12
6	I	A10	Memory address 11
7	I	A9	Memory address 10
8	I	A8	Memory address 9
9	I	NC	Memory address 20
10	I	NC	Memory address 21
11	I	/WE	Write enable : low
12	I	/RST	Reset : low
13	-	NC	(Not used)
14	-	VPP/WP	(Not used)
15	I	RDY/BSY	DVD Ready (Busy : low)
16	I	A18	Memory address 19
17	I	A17	Memory address 18
18	I	A7	Memory address 8
19	I	A6	Memory address 7
20	I	A5	Memory address 6
21	I	A4	Memory address 5
22	I	A3	Memory address 4
23	I	A2	Memory address 3
24	I	A1	Memory address 2
25	I	A0	Memory address 1
26	I	/CE	Memory chip select : low
27	-	VSS	Ground
28	I	/OE	Output enable : low
29	I/O	DQ0	Memory data 0
30	I/O	DQ8	Memory data 8
31	I/O	DQ1	Memory data 1
32	I/O	DQ9	Memory data 9
33	I/O	DQ2	Memory data 2
34	I/O	DQ10	Memory data 10
35	I/O	DQ3	Memory data 3
36	I/O	DQ11	Memory data 11
37	I	VCC	+3.3V
38	I/O	DQ4	Memory data 4
39	I/O	DQ12	Memory data 12
40	I/O	DQ5	Memory data 5
41	I/O	DQ13	Memory data 13
42	I/O	DQ6	Memory data 6
43	I/O	DQ14	Memory data 14
44	I/O	DQ7	Memory data 7
45	I/O	DQ15A-1	Memory data 15
46	-	VSS	Ground
47	I	/BYTE	+3.3V
48	I	A16	Memory address 16

I/O CHART OF IC8202

Pin No.	I/O	Signal Name	Description
1	-	/OE	Output enable : low
2	I	D1	Memory data 0
3	I	D2	Memory data 1
4	I	D3	Memory data 2
5	I	D4	Memory data 3
6	I	D5	Memory data 4
7	I	D6	Memory data 5
8	I	D7	Memory data 6
9	I	D8	Memory data 7
10	-	GND	Ground
11	I	LE	Memory chip select : low
12	O	Q8	Memory address 8
13	O	Q7	Memory address 7
14	O	Q6	Memory address 6
15	O	Q5	Memory address 5
16	O	Q4	Memory address 4
17	O	Q3	Memory address 3
18	O	Q2	Memory address 2
19	O	Q1	Memory address 1
20	I	VCC	+3.3V

I/O CHART OF IC8203

Pin No.	I/O	Signal Name	Description
1	-	/OE	Output enable : low
2	I	D1	Memory data 0
3	I	D2	Memory data 1
4	I	D3	Memory data 2
5	I	D4	Memory data 3
6	I	D5	Memory data 4
7	I	D6	Memory data 5
8	I	D7	Memory data 6
9	I	D8	Memory data 7
10	-	GND	Ground
11	I	LE	Memory chip select : low
12	O	Q8	Memory address 8
13	O	Q7	Memory address 7
14	O	Q6	Memory address 6
15	O	Q5	Memory address 5
16	O	Q4	Memory address 4
17	O	Q3	Memory address 3
18	O	Q2	Memory address 2
19	O	Q1	Memory address 1
20	I	VCC	+3.3V

I/O CHART OF IC8204

Pin No.	I/O	Signal Name	Description
1	I	VDD	+3.3V
2	I/O	DQ0	SDRAM data 0
3	I	VDDQ	+3.3V
4	I/O	DQ1	SDRAM data 1
5	I/O	DQ2	SDRAM data 2
6	-	VSSQ	Ground
7	I/O	DQ3	SDRAM data 3
8	I/O	DQ4	SDRAM data 4
9	I	VDDQ	+3.3V
10	I/O	DQ5	SDRAM data 5
11	I/O	DQ6	SDRAM data 6
12	-	VSSQ	Ground
13	I/O	DQ7	SDRAM data 7
14	-	NC	(Not used)
15	I	VDD	+3.3V
16	I	DQM0	Data input/output mask 0
17	I	/WE	Write enable : low
18	I	/CAS	Column address strobe : low
19	I	/RAS	Row address strobe :low
20	I	/CS	SDRAM chip select : low
21	I	All	SDRAM address 11
22	I	BA0	Bank address 0
23	I	BA1	Bank address 1
24	I	A10	SDRAM address 10
25	I	A0	SDRAM address 0
26	I	A1	SDRAM address 1
27	I	A2	SDRAM address 2
28	I	DQM2	Data input/output mask 2
29	I	VDD	+3.3V
30	-	NC	(Not used)
31	I/O	DQ16	SDRAM data 16
32	-	VSSQ	Ground
33	I/O	DQ17	SDRAM data 17
34	I/O	DQ18	SDRAM data 18
35	I	VDDQ	+3.3V
36	I/O	DQ19	SDRAM data 19
37	I/O	DQ20	SDRAM data 20
38	-	VSSQ	Ground
39	I/O	DQ21	SDRAM data 21
40	I/O	DQ22	SDRAM data 22
41	I	VDDQ	+3.3V
42	I/O	DQ23	SDRAM data 23
43	I	VDD	+3.3V
44	-	VSS	Ground
45	I/O	DQ24	SDRAM data 24
46	-	VSSQ	Ground
47	I/O	DQ25	SDRAM data 25
48	I/O	DQ26	SDRAM data 26
49	I	VDDQ	+3.3V
50	I/O	DQ27	SDRAM data 27
51	I/O	DQ28	SDRAM data 28
52	-	VSSQ	Ground
53	I/O	DQ29	SDRAM data 29
54	I/O	DQ30	SDRAM data 30
55	I	VDDQ	+3.3V
56	I/O	DQ31	SDRAM data 31
57	-	NC	(Not used)
58	-	VSS	Ground
59	I	DQM3	Data input/output mask 3
60	I	A3	SDRAM address 3
61	I	A4	SDRAM address 4
62	I	A5	SDRAM address 5
63	I	A6	SDRAM address 6
64	I	A7	SDRAM address 7
65	I	A8	SDRAM address 8
66	I	A9	SDRAM address 9
67	-	CKE	(Not used)
68	I	CLK	SDRAM clock
69	-	NC	(Not used)
70	-	NC	(Not used)
71	I	DQM1	Data input/output mask 1
72	-	VSS	Ground
73	-	NC	(Not used)
74	I/O	DQ8	SDRAM data 8
75	I	VDDQ	+3.3V
76	I/O	DQ9	SDRAM data 9
77	I/O	DQ10	SDRAM data 10
78	-	VSSQ	Ground
79	I/O	DQ11	SDRAM data 11
80	I/O	DQ12	SDRAM data 12
81	I	VDDQ	+3.3V
82	I/O	DQ13	SDRAM data 13
83	I/O	DQ14	SDRAM data 14
84	-	VSSQ	Ground
85	I/O	DQ15	SDRAM data 15
86	-	VSS	Ground

DVD MAIN III SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

PB VIDEO SIGNAL
PB AUDIO SIGNAL
w/ DVD_COMBI
w/ DVD_VCR
IC8401 BH7862FS (VIDEO AMP) C92B00003377
IC8501 PCM1752K AUDIO D/A CONVERTER
IC8502 PCM1607K 5.1ch AUDIO D/A CONVERTER
IC8503 AN6552S (OP AMP)
TO DVD M I
TO DVD M I,DVD M II
TO DVD M II,DVD M IV
TO MAIN C.B.A.
P8401
P5001
P8402 (TO MAIN C.B.A.)

LINK TO VOLTAGE CHART

LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN III SCHEMATIC DIAGRAM

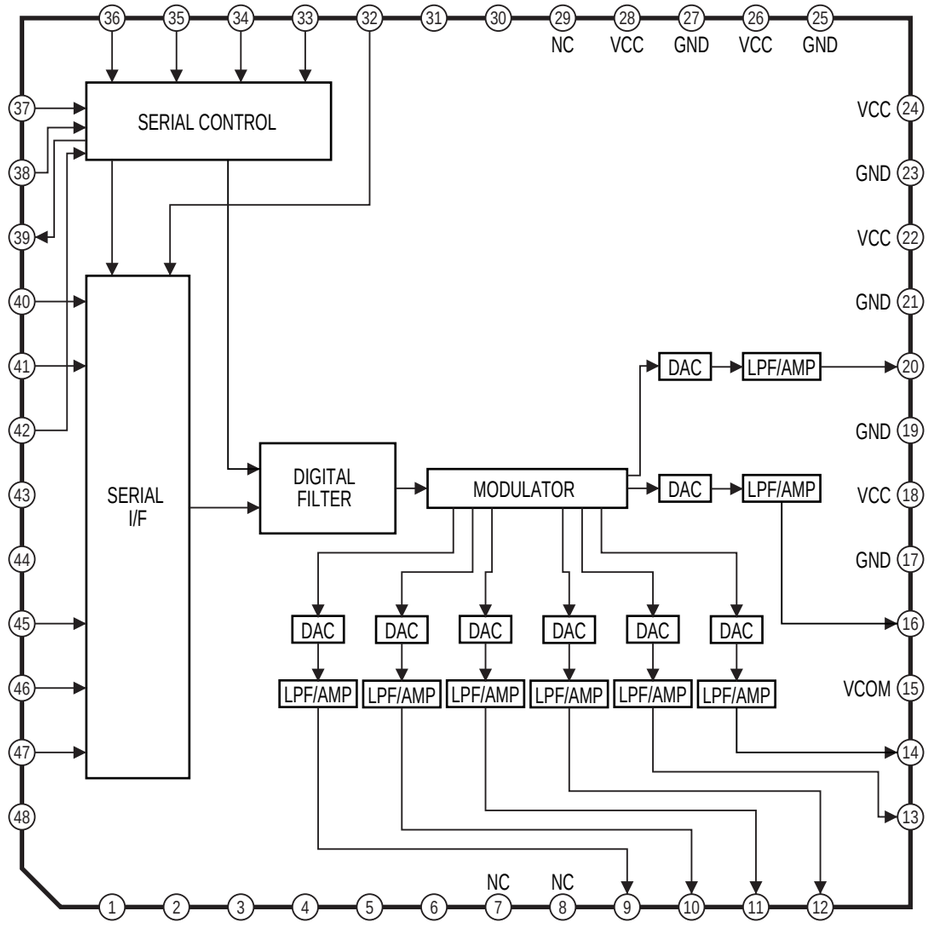
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

IC8501 IC-DETAIL BLOCK DIAGRAM

IC8502 IC-DETAIL BLOCK DIAGRAM

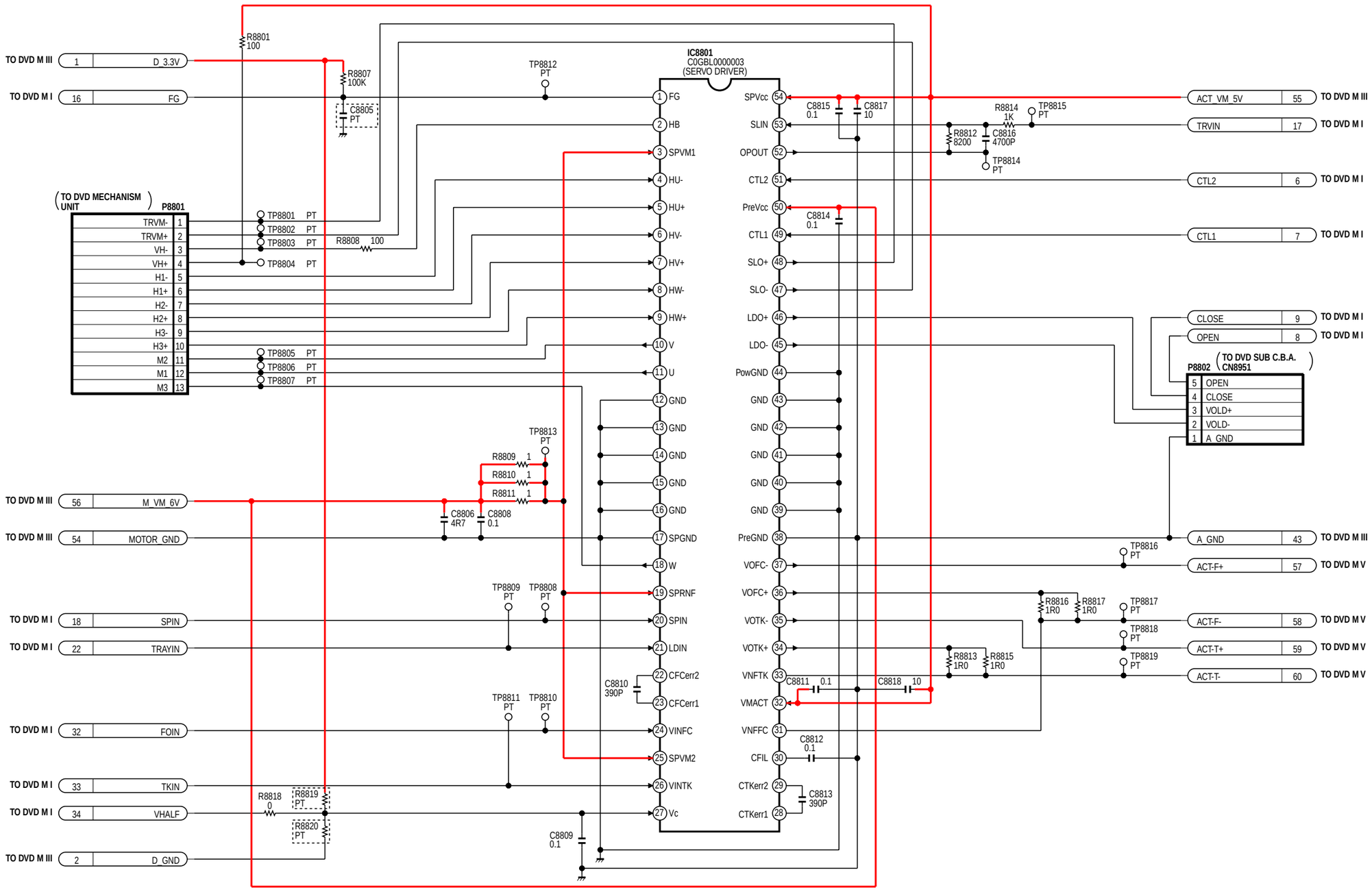


DVD MAIN IV SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

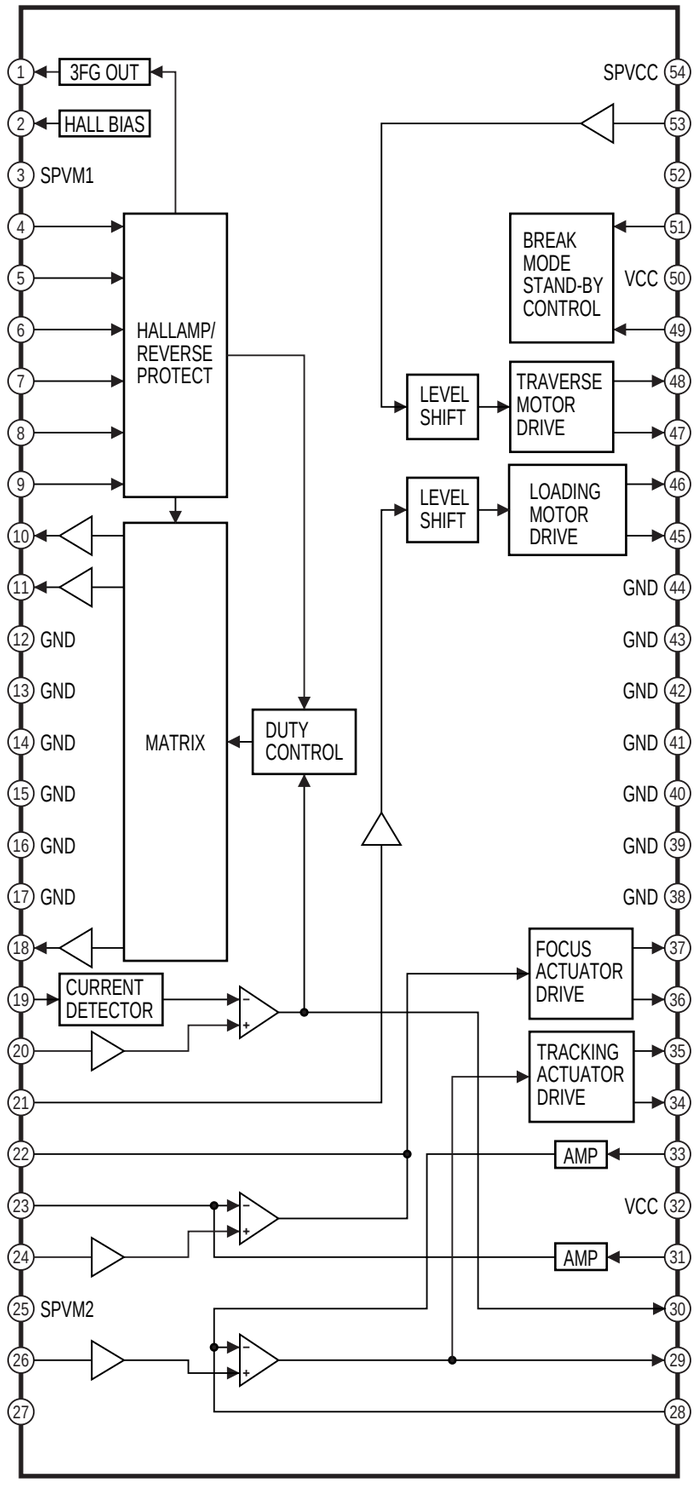
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN IV SCHEMATIC DIAGRAM

IC8801 IC-DETAIL BLOCK DIAGRAM

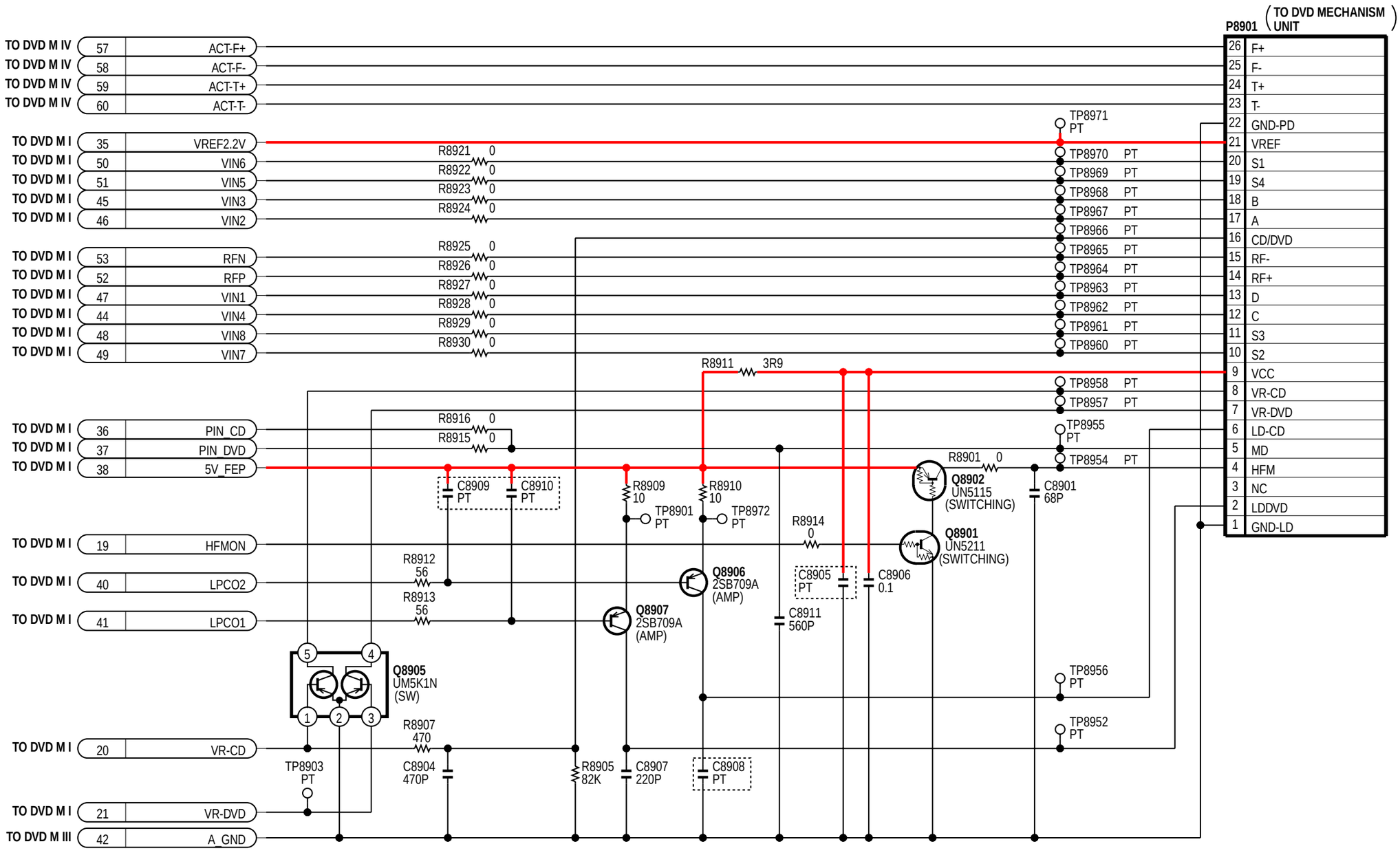


DVD MAIN V SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

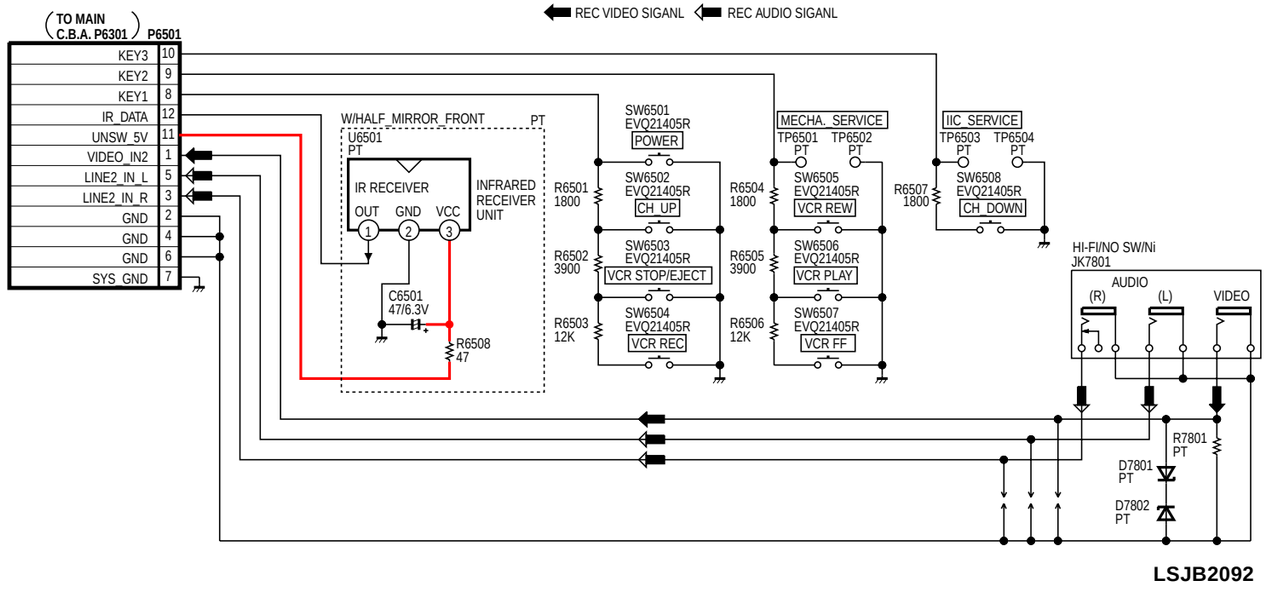
LSJB2091
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
DVD MAIN V SCHEMATIC DIAGRAM

OPERATION I SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

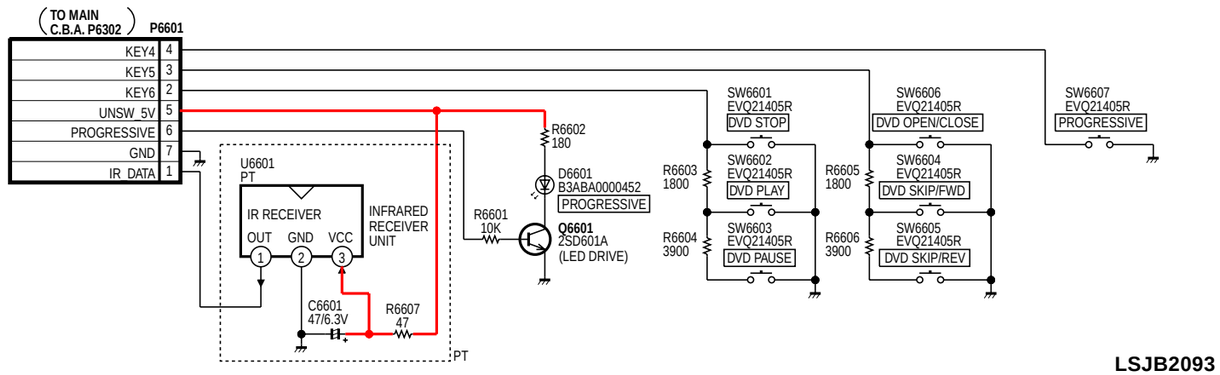
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LSJB2092

OPERATION II SCHEMATIC DIAGRAM



LSJB2093

LINK TO VOLTAGE CHART

MAIN I (SYSTEM CONTROL/ SERVO) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT

KEY VOLTAGE CHART (SW6501～6508, 6601～6607)

TERMINAL VOLTAGE	0V～0.6V	0.7V～1.9V	2.0V～3.1V	3.2V～4.4V
KEY DATA1 (PIN 89)	POWER	CH UP	VCR STOP/EJECT	VCR REC
KEY DATA2 (PIN 88)	-----	VCR REW	VCR PLAY	VCR FF
KEY DATA3 (PIN 87)	-----	CH DOWN	-----	-----
KEY DATA4 (PIN 86)	PRO-GRESSIVE	-----	-----	-----
KEY DATA5 (PIN 84)	DVD OPEN/CLOSE	DVD SKIP/FWD	DVD SKIP/REW	-----
KEY DATA6 (PIN 78)	DVD STOP	DVD PLAY	DVD PAUSE	-----

***Note**

R6210 and C6202 replacement note for the models PV-D4733S, PV-D4743, and PV-D4743S:
Early units of the models PV-D4733S, PV-D4743, and PV-D4743S use a Main C.B.A. with suffix version number LSJB2082-1 which employs two different specifications as shown below.

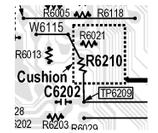


Fig.1

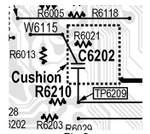


Fig.2

When replacing R6210 or C6202 on Main C.B.A. with suffix version number LSJB2082-1, order the RESISTOR KIT (LSUC0015), then replace both R6210 and C6202 at the same time as shown in Fig.2.
The RESISTOR KIT (LSUC0015) consists of R6210 (ERJ6GEYJ825V), C6202 (ECKR1H102KB5), and a cushion (VMTS0059).

LINK TO VOLTAGE CHART

LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN I (SYSTEM CONTROL/SERVO) SCHEMATIC DIAGRAM

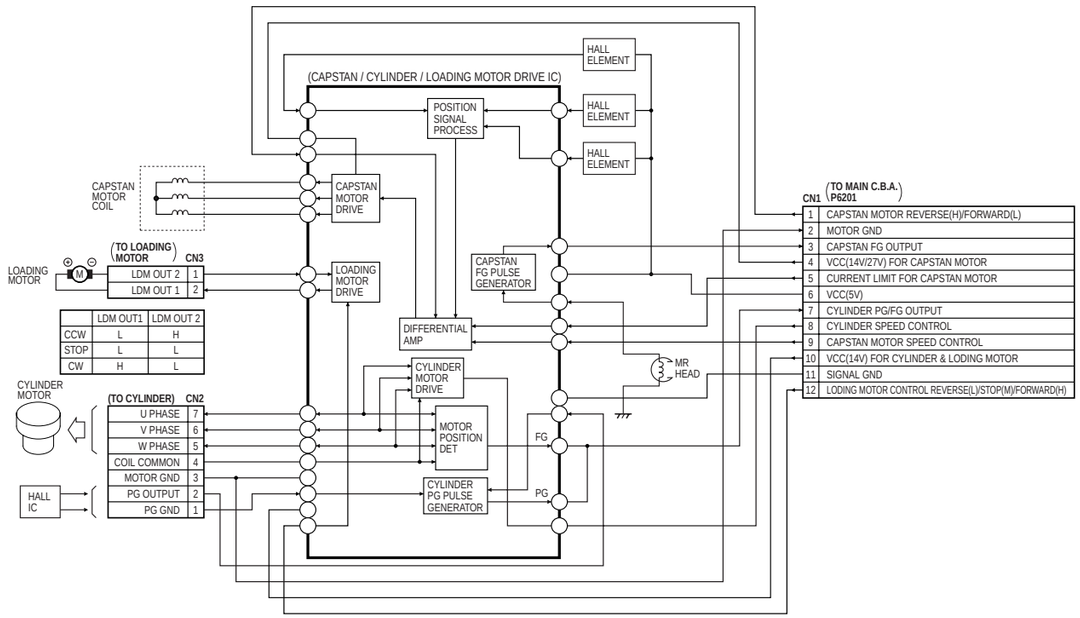
I/O CHART OF IC6001

Pin No.	I/O	Signal Name	Description
1	I	POWER_DOWN_L	POWER DOWN(L)
2	I	D-RDY	DVD READY(H)
3	I	T-REEL	TAKEUP REEL PULSE
4	I	S-REEL	SUPPLY REEL PULSE
5	I	IR-DATA	IR-DATA
6	-	NC	(Not used)
7	-	NC	(Not used)
8	O	LD_CTL	LOADING MOTOR CONTROL REVERSE(L)/STOP(M)/FORWARD(H)
9	O	DVD_RST_L	DVD RESET(L)
10	O	TV_L/VCR_H	TV(L)/VCR(H)
11	O	SCK_1	SERIAL CLOCK 1
12	-	SLAVE_DATA_1	(Not used)
13	O	MASTER_DATA_1	SERIAL DATA 0
14	I	SCK_0	DVD SERIAL CLOCK
15	I	SLAVE_DATA_0	DVD SERIAL DATA 1
16	O	MASTER_DATA_0	DVD SERIAL DATA 0
17	I/O	IIC_DATA	I2C SERIAL DATA
18	O	IIC_CLK	I2C SERIAL CLOCK
19	-	POWER_ON_H	(Not used)
20	O	DEFEAT_H	AUDIO DEFEAT(H)
21	O	CAP_R/F	CAPSTAN MOTOR REVERSE(H)/FORWARD(L)
22	O	A-MUTE_H	AUDIO MUTE(H)
23	O	HSW	HEAD SW
24	O	V-LOCKPLS	V-LOCK PULSE
25	I	RST	RESET
26	O	1/4_OSC	3.58MHz
27	O	HIFI-HSW	Hi-Fi HEAD SW
28	O	V-D-REC_H	VIDEO DELAY REC(H)
29	I	HIFI-PB_H	Hi-Fi PB(H)
30	I	S-TAB	SAFETY TAB BROKEN(H)
31	O	PANE_CS	PANEL CS(L)
32	O	3CH_HIZ/4CH_L	CH3(H)/CH4(L)
33	O	PWM1(CAP)	CAP ERROR
34	O	PWM0(CYL)	CYL ERROR
35	-	PANE_CLK	(Not used)
36	I	DVDD	VDD
37	O	OSC_OUT	OSC 2
38	I	OSC_IN	OSC 1
39	-	DVSS	GND
40	O	DVD_AUDIO_SW_H	DVD AUDIO CONTROL ON(H)/OFF(L))
41	O	SW_MUTE_H	SW MUTE(H)
42	-	SXI	SXI
43	-	W/CANADA_L	(Not used)
44	-	NC	(Not used)
45	-	SD_RDY	SD READY(L)
46	-	NC	(Not used)
47	O	CV_OUT	VIDEO
48	-	OSD_VSS	GND
49	I	CV_IN	VIDEO
50	I	CV_IN2	V-SYNC

Pin No.	I/O	Signal Name	Description
51	I	OSD_VDD	VDD
52	I	AFCC	AFC
53	O	AFCLPF	AFC
54	O	PROGRESSIVE_LED_ON_H	PROGRESSIVE LED ON(H)
55	O	PROGRESSIVE_SW_ON_H	PROGRESSIVE ON(H)
56	O	5.1ch_MUTE_H	5.1ch AUDIO MUTE(H)
57	O	SD_POWER_ON_H	SD POWER ON (H)
58	O	SD_SEL_H	VIDEO SIGNAL OUTPUT SELECT(SD(H)/DVD/VCR(L))
59	O	SD_RST_L	SD RESET(L)
60	O	SD_CS	SD CS(L)
61	-	NC	(Not used)
62	-	NC	(Not used)
63	-	NC	(Not used)
64	-	NC	(Not used)
65	I	PFG	CYL PG/FG
66	-	NC	(Not used)
67	I	FGF	CAP FG
68	-	AFG	CAP FG
69	O	VRO	V-REF 1
70	-	VRI	V-REF 2
71	-	AVSS	GND
72	-	CTLA	CTL AMP
73	I	AVDD	VDD
74	I/O	RCTLP	CTL PULSE(+)
75	-	RCTLN	CTL PULSE(-)
76	-	CO	PB CONTROL PULSE
77	-	NC	(Not used)
78	I	KEY6	KEY DATA 6
79	I	T-PHOTO_L	TAKEUP PHOTO TR(L)
80	I	S-PHOTO_L	SUPPLY PHOTO TR(L)
81	I	DTS-AFC	AFC
82	I	MTS_MODE	MTS MODE
83	O	POWER-ON_L	POWER ON(L)
84	I	KEY5	KEY DATA 5
85	I	AT_ENV	ENV-VOLTAGE
86	I	KEY4	KEY DATA 4
87	I	KEY3	KEY DATA 3
88	I	KEY2	KEY DATA 2
89	I	KEY1	KEY DATA 1
90	O	H-RDY	HOST READY(H)
91	O	DVD_PWR_ON_H	DVD POWER ON(H)
92	O	DVD_SEL_H	DVD SELECT(H)
93	-	NC	(Not used)
94	-	NC	(Not used)
95	I	POS.3	MODE SW POSITION C
96	I	POS.2	MODE SW POSITION B
97	I	POS.1	MODE SW POSITION A
98	O	ROT	ROTARY SW
99	O	HAMP	HEAD AMP SW
100	I	DENV	ENVELOPE DET

CAPSTAN MOTOR ASS'Y

NOTE:
CAPSTAN MOTOR ASS'Y (REF. NO. 46) IS SUPPLIED AS A UNIT ONLY.
HOWEVER, THE FLAT FLEXIBLE CABLE (REF. NO. 48) IS AVAILABLE SEPARATELY AS A REPLACEMENT PART.



MAIN II (SIGNAL PROCESS/AUDIO) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

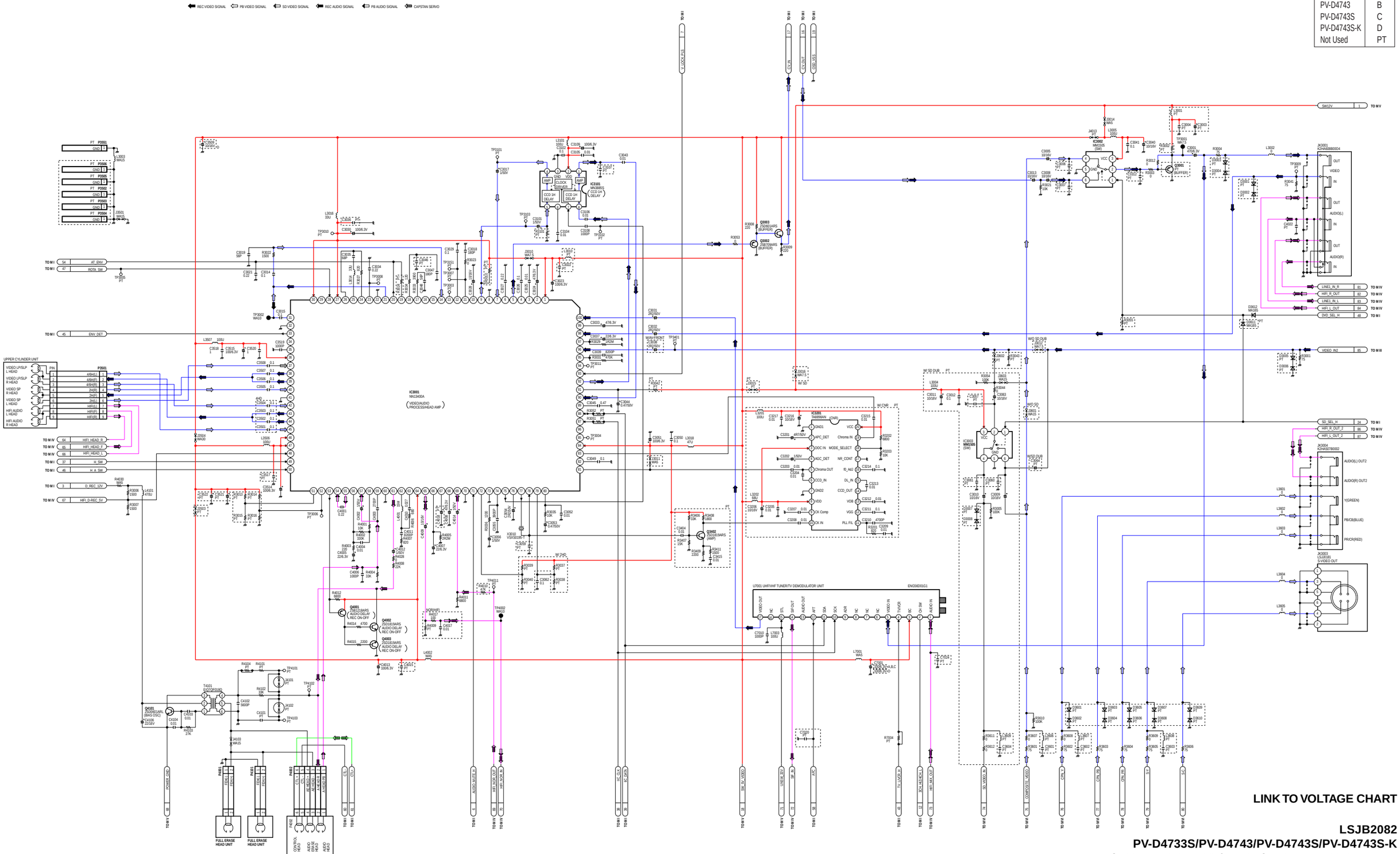
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT

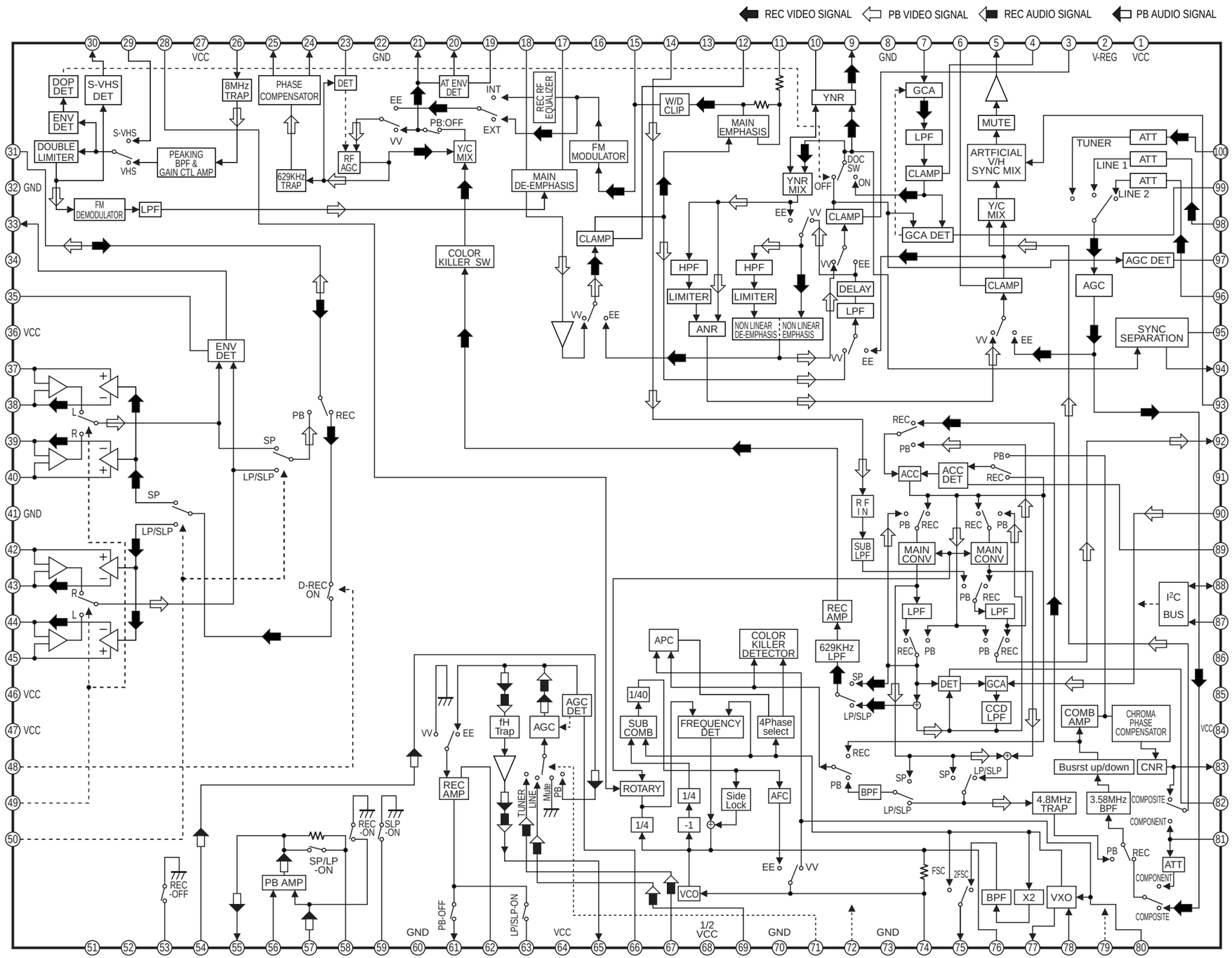
REC VIDEO SIGNAL
PB VIDEO SIGNAL
SD VIDEO SIGNAL
REC AUDIO SIGNAL
PB AUDIO SIGNAL
CAPSTAN SERVO



LINK TO VOLTAGE CHART

LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN II (SIGNAL PROCESS/ AUDIO) SCHEMATIC DIAGRAM

IC3001 IC- DETAIL BLOCK DIAGRAM



PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
IC3001 DETAIL BLOCK DIAGRAM

MAIN III (OPERATION) SCHEMATIC DIAGRAM

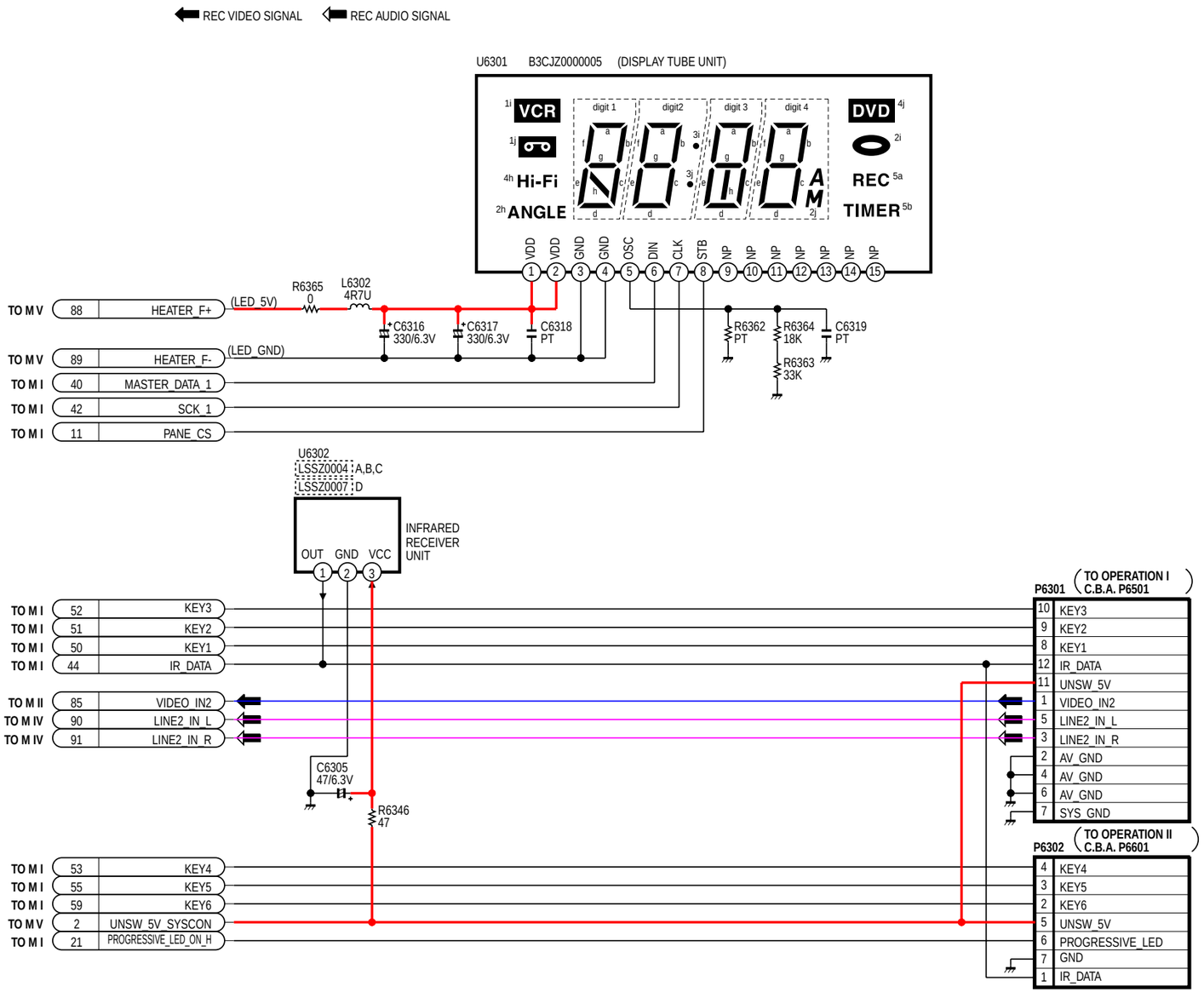
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT



LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN III (OPERATION) SCHEMATIC DIAGRAM

MAIN IV (Hi-Fi) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT

REC AUDIO SIGNAL
PB AUDIO SIGNAL

TO M IV
SW - 12V AUDIO 95
DVD AUDIO SW H 14
SW MUTE H 15
SW 9V 1
MTS MODE 57
SIF IN 72
DEFEAT H 4
IIC DATA 39
IIC CLK 38
AUDIO MUTE H 6
SW 5V VIDEO 18

TO M II
HIFI_R_OUT_2 86
HIFI_L_OUT_2 87
HIFI_R_OUT 82
HIFI_L_OUT 84
HIFI_MIX_OUT 73
HIFI_NOR_OUT 69
HIFI_NOR_IN 70
DVD_AUDIO_R 92
DVD_AUDIO_L 93
FRONT_MUTE_H 94

TO M I
1/4_OSC 8
HIFI_D-REC_5V 67
HIFI_PLAY_H 10
HIFI_H_SW 9
HIFI_HEAD_L 66
HIFI_HEAD_F 65
HIFI_HEAD_R 64
DVD_SEL_H 48
LINE1_IN_R 91
LINE2_IN_R 93
LINE2_IN_L 92
LINE1_IN_L 90

IC4304 BU4052BCF (SW)
IC4303 UPC4570G (OP AMP)
IC4302 UPC4570G (OP AMP)
IC4301 BU4053BCF (OUTPUT SELECT)
IC4201 AN3663FBP-V Hi-Fi AUDIO MTS/SAP PROCESS

LINK TO VOLTAGE CHART

LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN IV (Hi-Fi) SCHEMATIC DIAGRAM

MAIN V (POWER SUPPLY) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

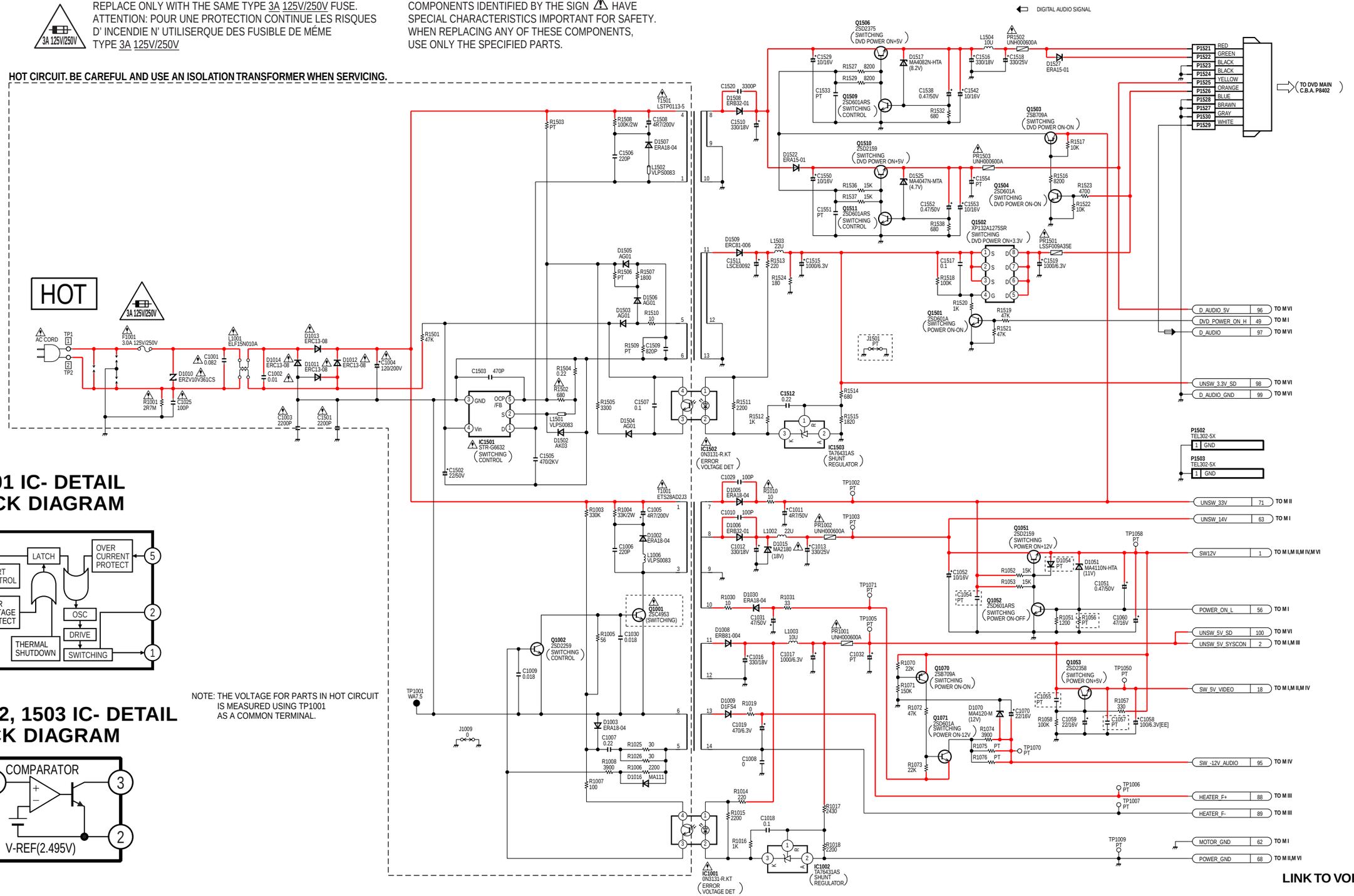
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME TYPE 3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.



IC1501 IC- DETAIL BLOCK DIAGRAM

IC1002, 1503 IC- DETAIL BLOCK DIAGRAM

NOTE: THE VOLTAGE FOR PARTS IN HOT CIRCUIT IS MEASURED USING TP1001 AS A COMMON TERMINAL.

LINK TO VOLTAGE CHART

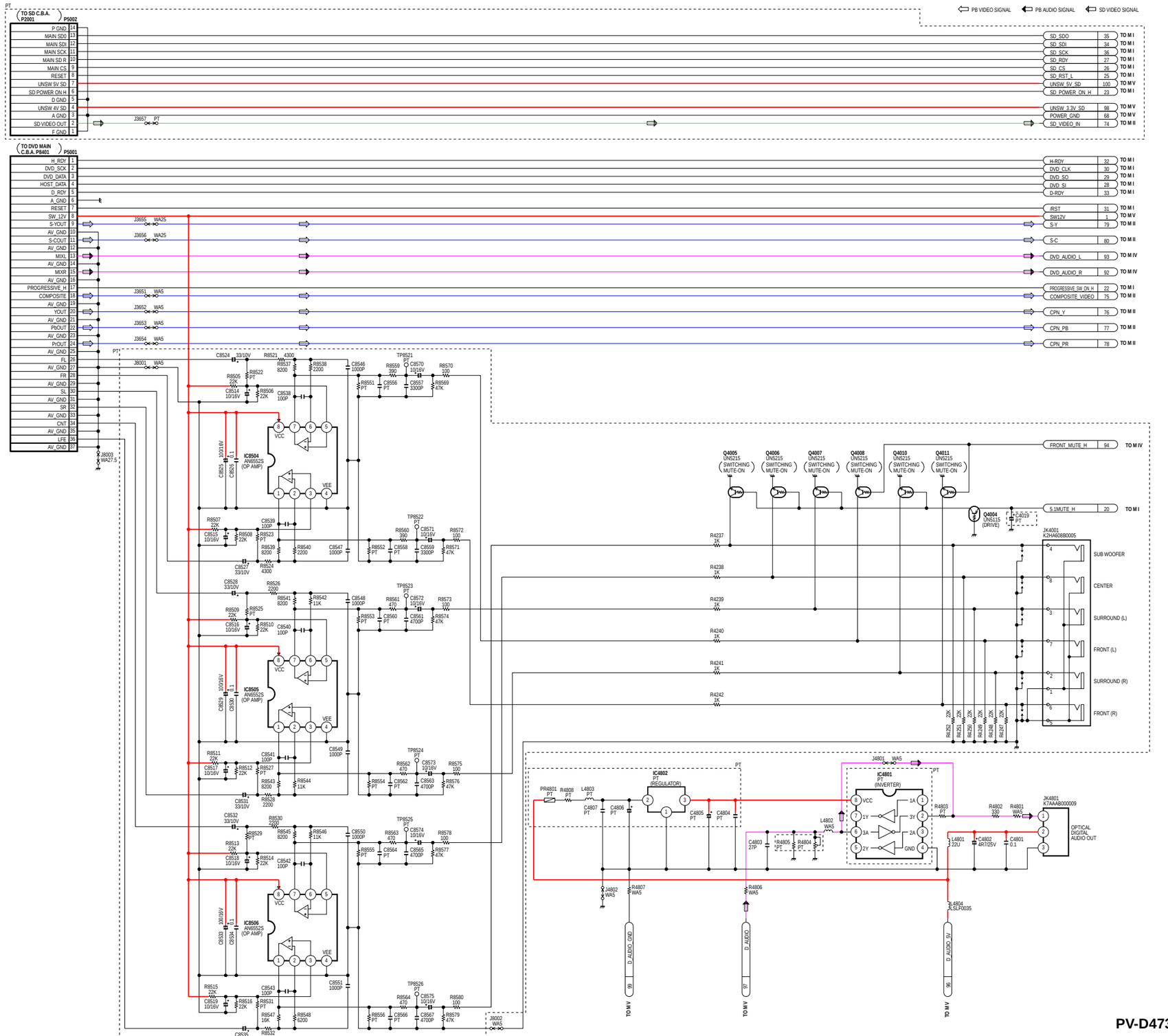
LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN V (POWER SUPPLY) SCHEMATIC DIAGRAM

MAIN VI (5.1ch AUDIO) SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LSJB2082
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K
MAIN VI (5.1ch AUDIO) SCHEMATIC DIAGRAM

1. **Important safety notice**

   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components. Use only the specified parts.

2. Do not use the part number shown on this drawing for ordering.
   The correct part number and part value is shown in the parts list, and may be slightly different or amended since this drawing was prepared.

3. Use only original replacement parts:
   To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Parts different in shape or size may be used.
   However, only interchangeable parts will be supplied as service replacement parts.

5. Test point information
   - :Test point with a jumper wire across a hole in P.C.B.
   - :Test point with a component lead on the foil side.
   - :Test point with no test pin.
   - :Test point with a test pin.

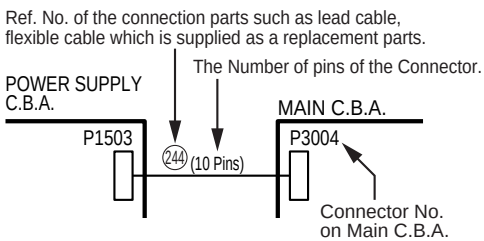
Schematic Diagram Notes

1. Indication for Zener Voltage of Zener Diodes
   The Zener Voltage of Zener Diodes are indicated as such on Schematic Diagrams.

   Example:
   (6.2V).....Zener Voltage

2. How to identify Connectors
   Each connector is labeled with a Connector No. and Pin No. Indicating what it is connected to,
   in other words, its counter part.
   Use the interconnection schematic diagram to find the connection between associated connectors.

   Example:
   The connections between C.B.A.s are shown below.



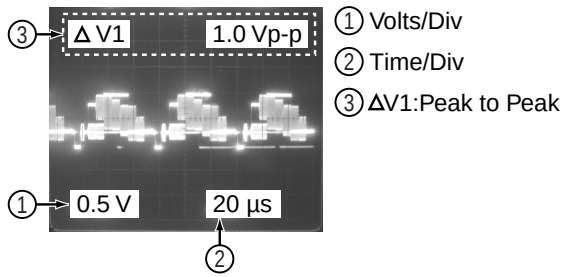
3. Parts marked "PT" are not used in any models included in this service model.

   Example: C6011 100P PT | C6011 PT | R6097 PT

4. Jumper wires are used for WA10, WA5 etc and these are not supplied as replacement parts.

Signal Waveform Note

How to read Signal Waveform



Voltage Chart Note

Voltage Measurement

a. Color bar signal in SP mode.
b. ---:Unmeasurable or not necessary to measure.

Circuit Board Layout Note

Circuit Board Layout shows components installed for various models.
For proper parts content for the model you are servicing, please refer to the schematic diagram and parts list.

NOTE:
Circuit Board Layout includes components which are not used.

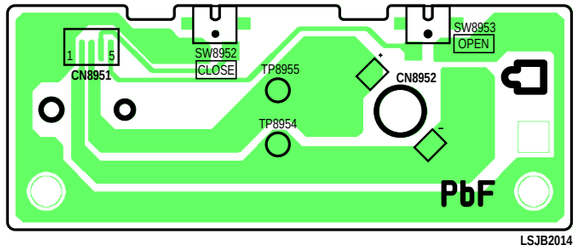
Model No. Identification Mark

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D
Not Used	PT

Note : Refer to item 3 of Schematic Diagram Notes for mark "PT".

DVD SUB C.B.A. LSEP2014A



LSJB2014

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

DVD MAIN C.B.A. LSEP2091B (A) / LSEP2091C (B,C,D)

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS. FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING, PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

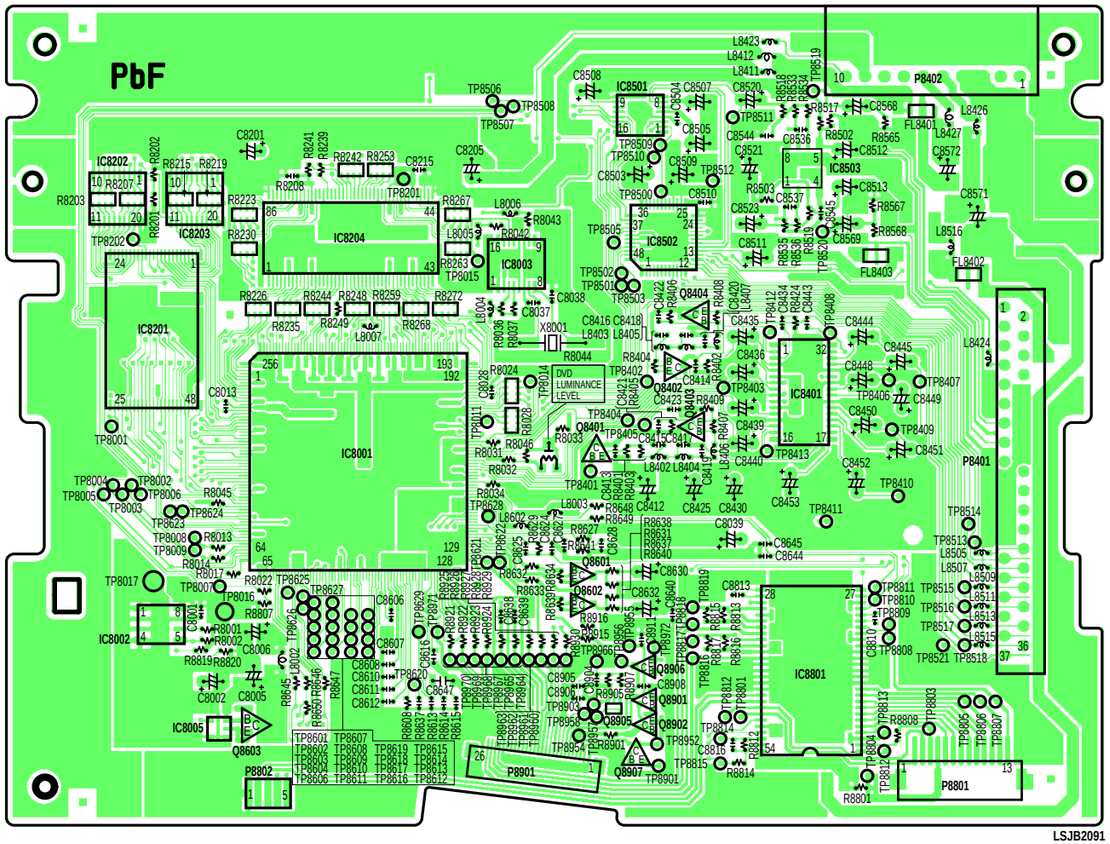
NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

NOTE: MULTILAYER C.B.A.
THIS C.B.A. IS Multi-Layer C.B.A. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

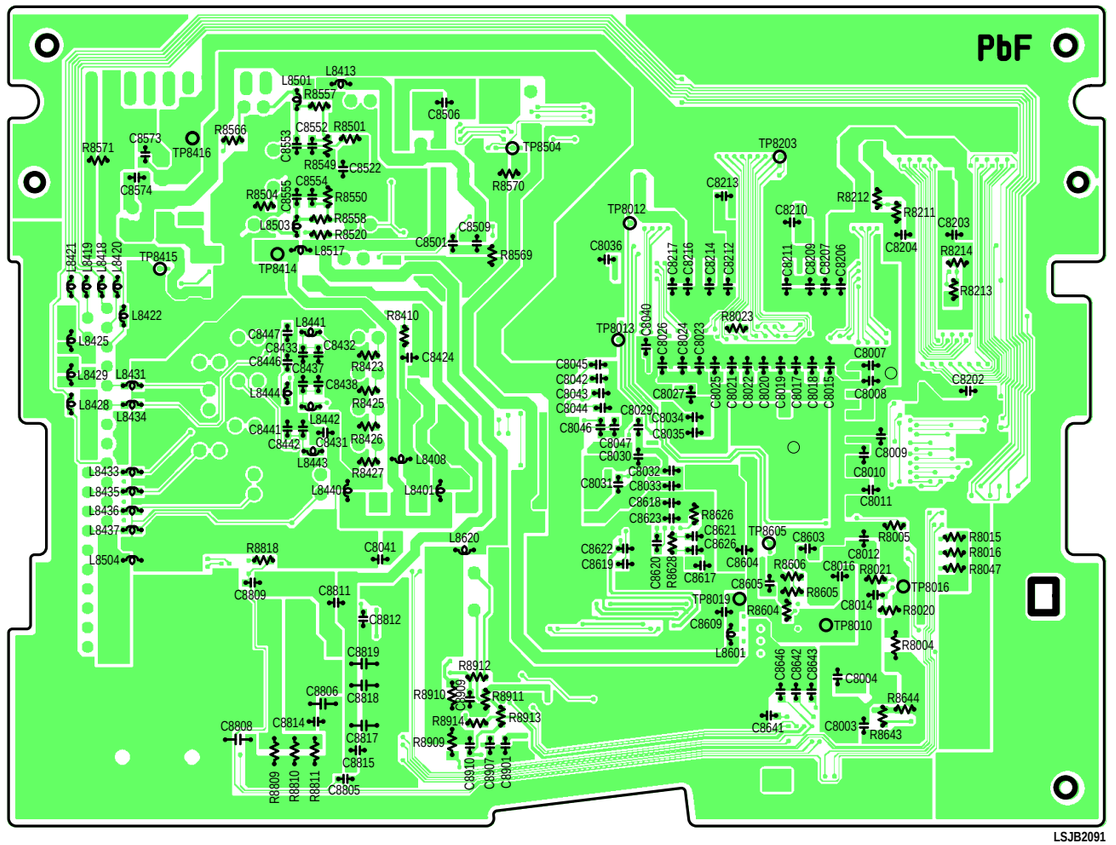
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D

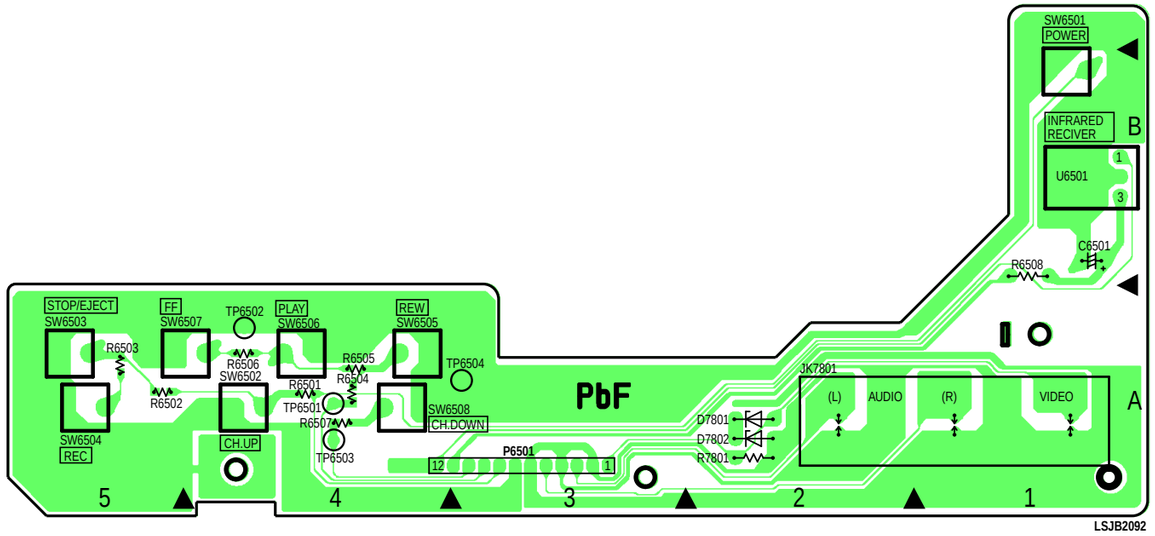
(COMPONENT SIDE)



(FOIL SIDE)



OPERATION I C.B.A. LSEP2092A



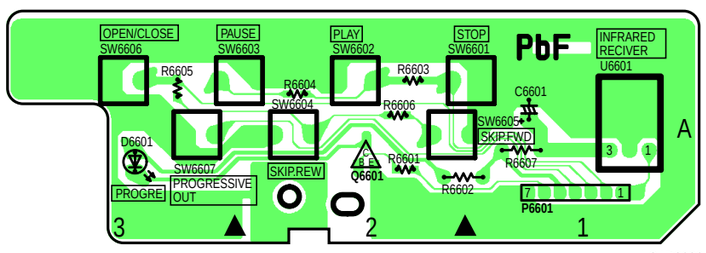
LSJB2092

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

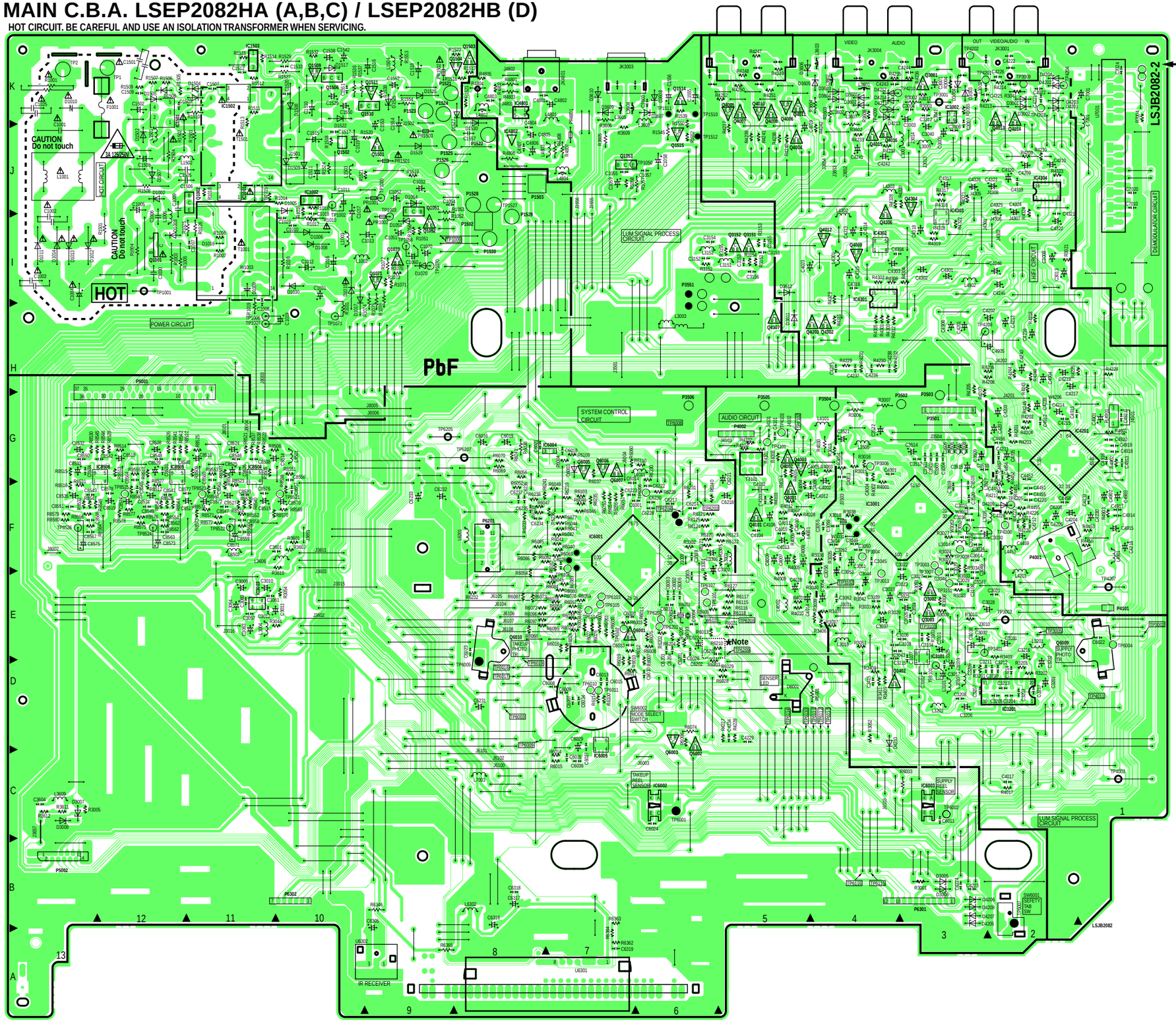
OPERATION II C.B.A. LSEP2093A



LSJB2093

MAIN C.B.A. LSEP2082HA (A,B,C) / LSEP2082HB (D)

HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.



*Note
MAIN C.B.A.
SUFFIX(VERSION) NUMBER

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-D4733S	A
PV-D4743	B
PV-D4743S	C
PV-D4743S-K	D

*Note

R6210 and C6202 replacement note for the models PV-D4733S, PV-D4743, and PV-D4743S:
Early units of the models PV-D4733S, PV-D4743, and PV-D4743S use a Main C.B.A. with suffix version number LSJB2082-1 which employs two different specifications as shown below.

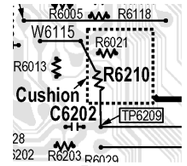


Fig.1

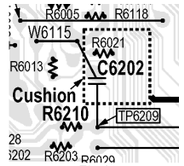


Fig.2

When replacing R6210 or C6202 on Main C.B.A. with suffix version number LSJB2082-1, order the RESISTOR KIT (LSUC0015), then replace both R6210 and C6202 at the same time as shown in Fig.2.
The RESISTOR KIT (LSUC0015) consists of R6210 (ERJ6GEYJ825V), C6202 (ECKR1H102KB5), and a cushion (VMTS0059).

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS. FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING, PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

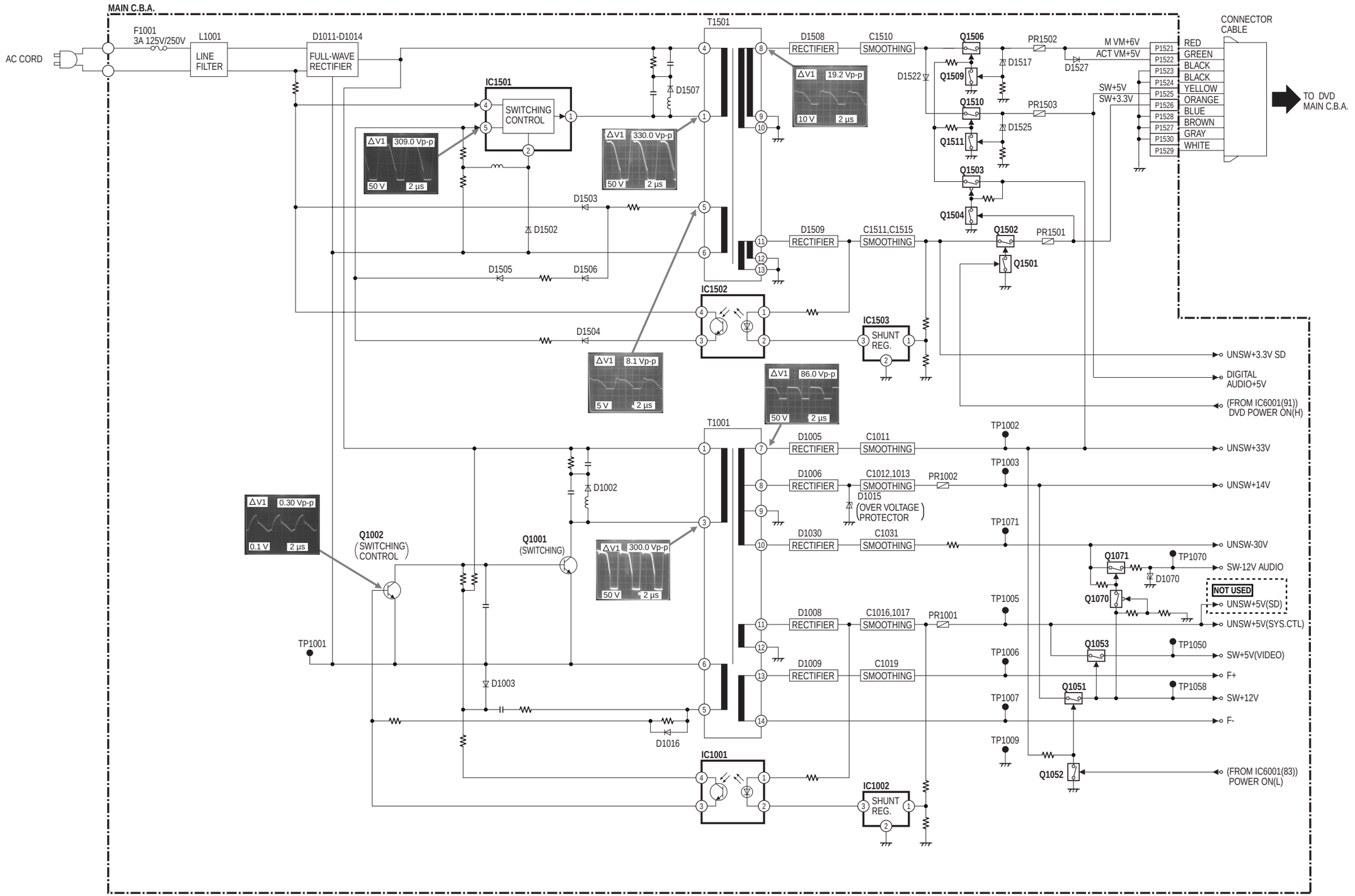
NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME TYPE 3A 125V/250V

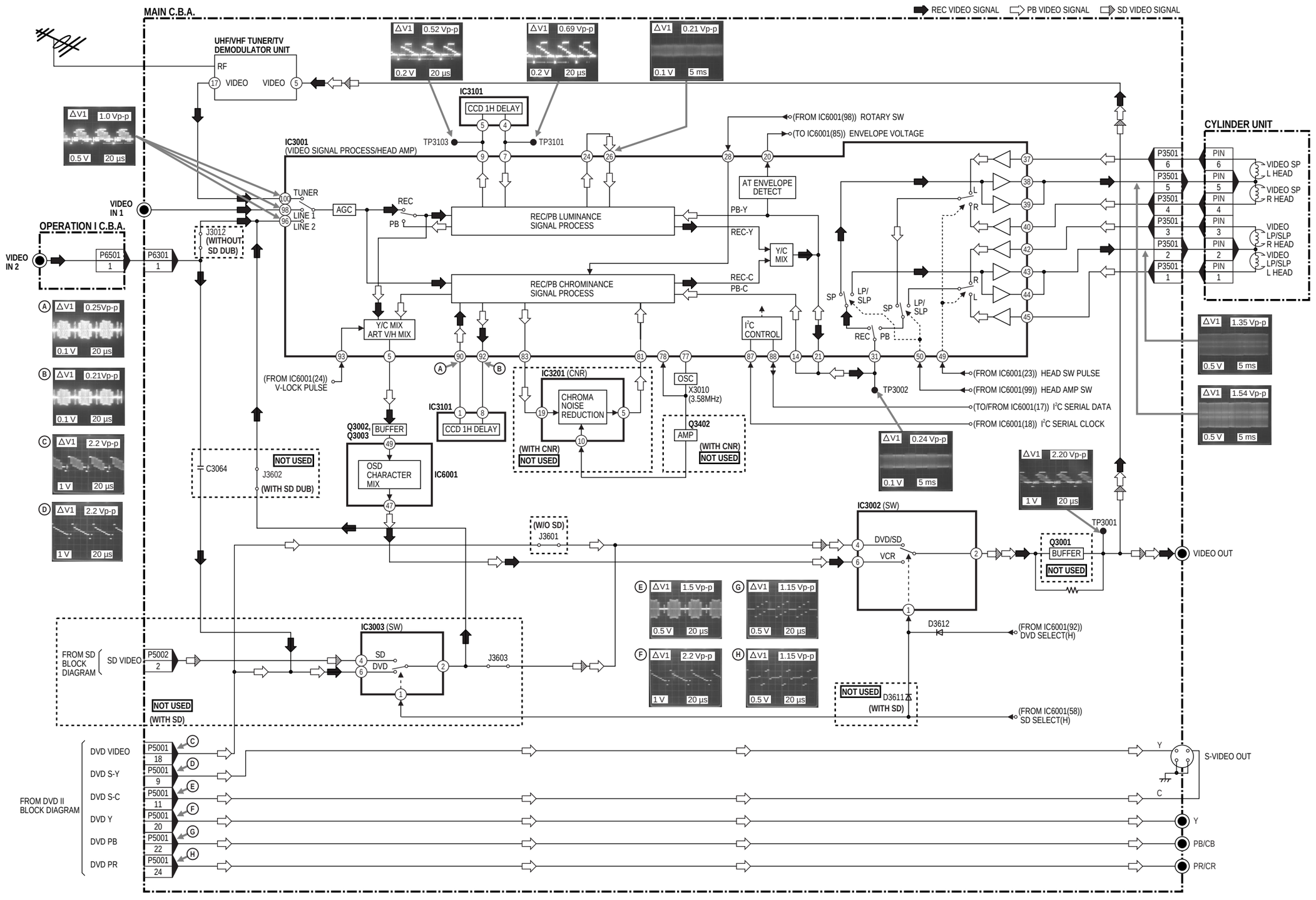
MAIN C.B.A. LSEP2082HA / LSEP2082HB
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K

POWER SUPPLY BLOCK DIAGRAM



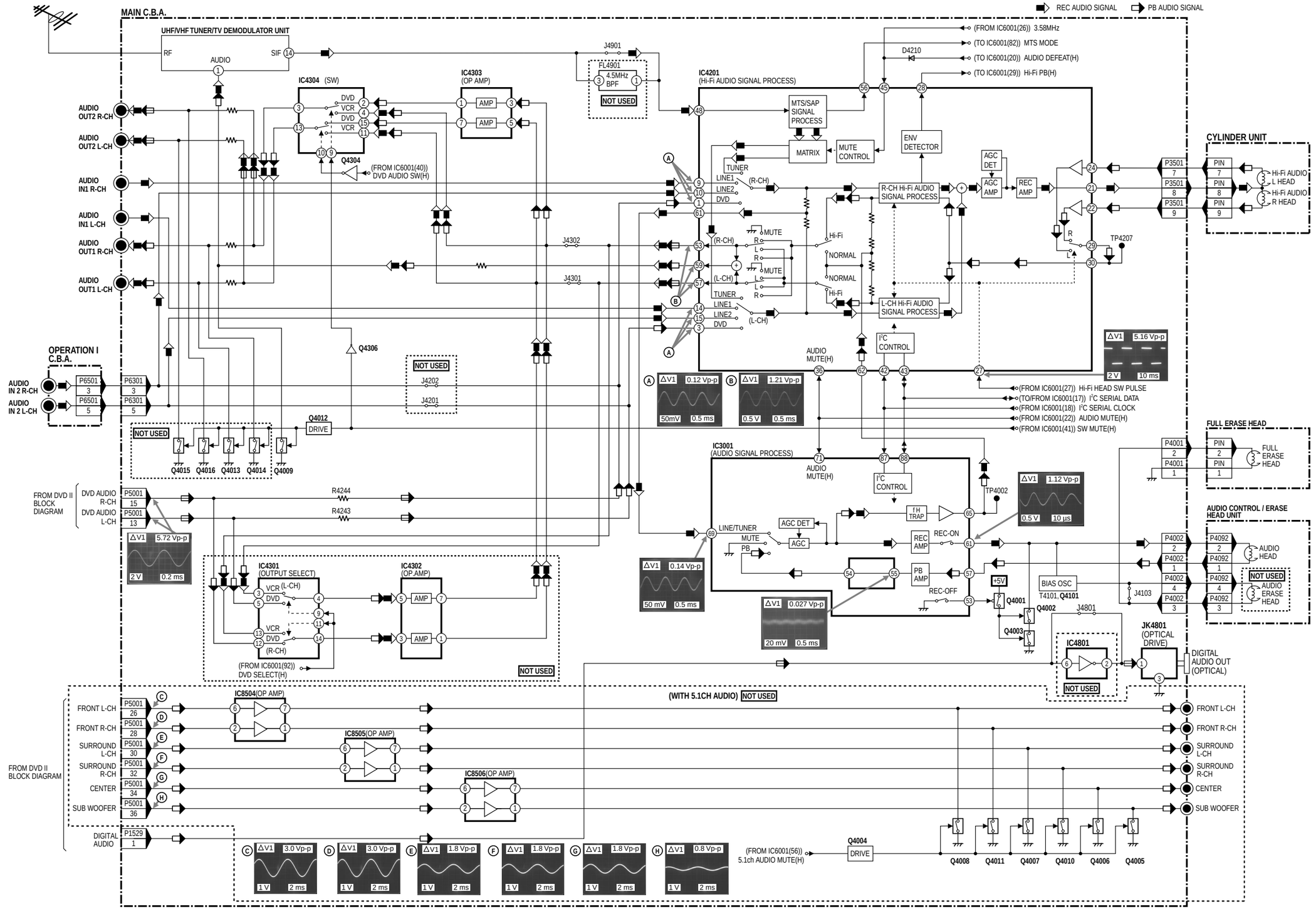
POWER SUPPLY BLOCK DIAGRAM
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K

VIDEO SIGNAL PATH BLOCK DIAGRAM



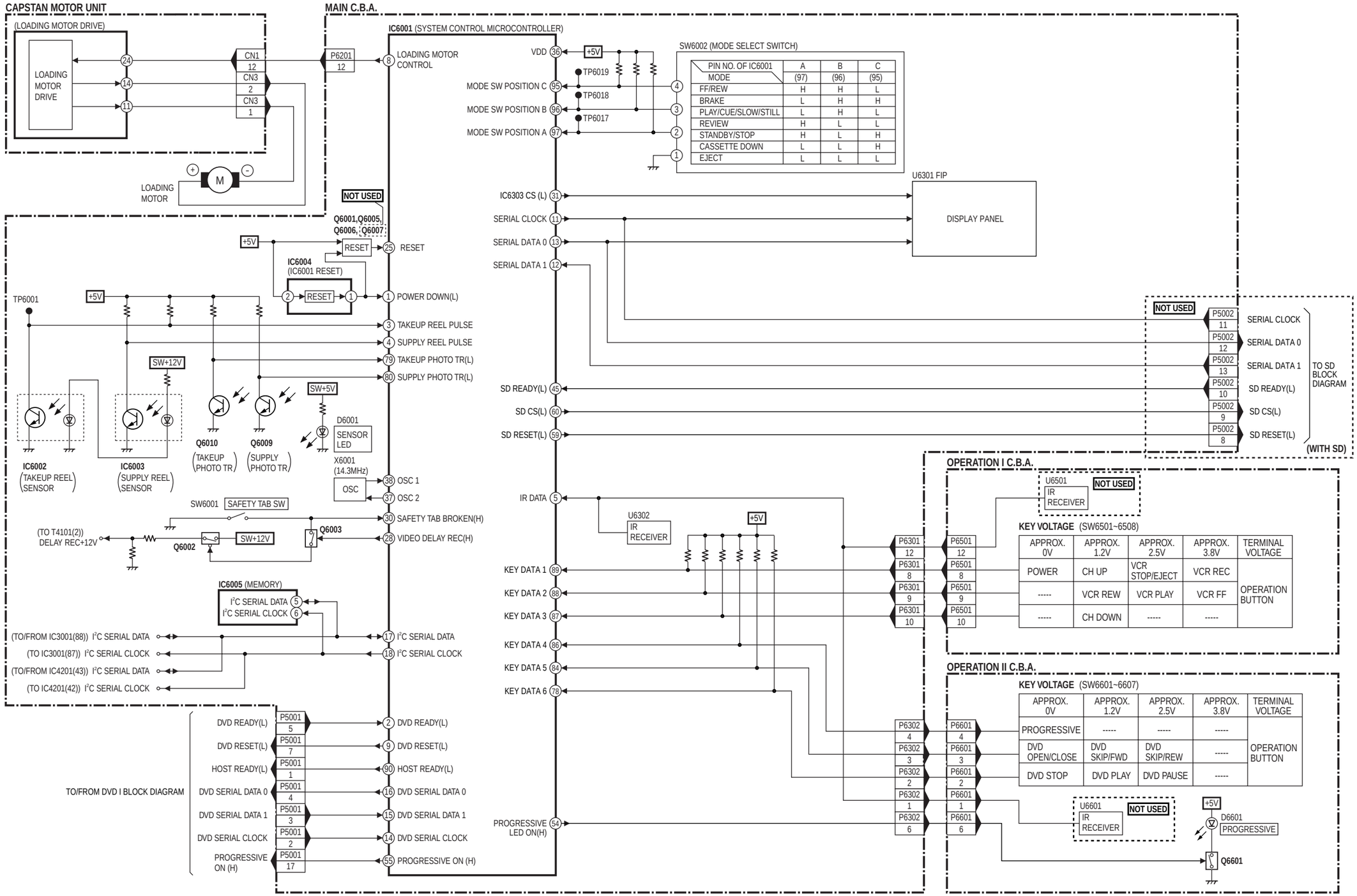
VIDEO SIGNAL PATH BLOCK DIAGRAM
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K

AUDIO SIGNAL PATH BLOCK DIAGRAM



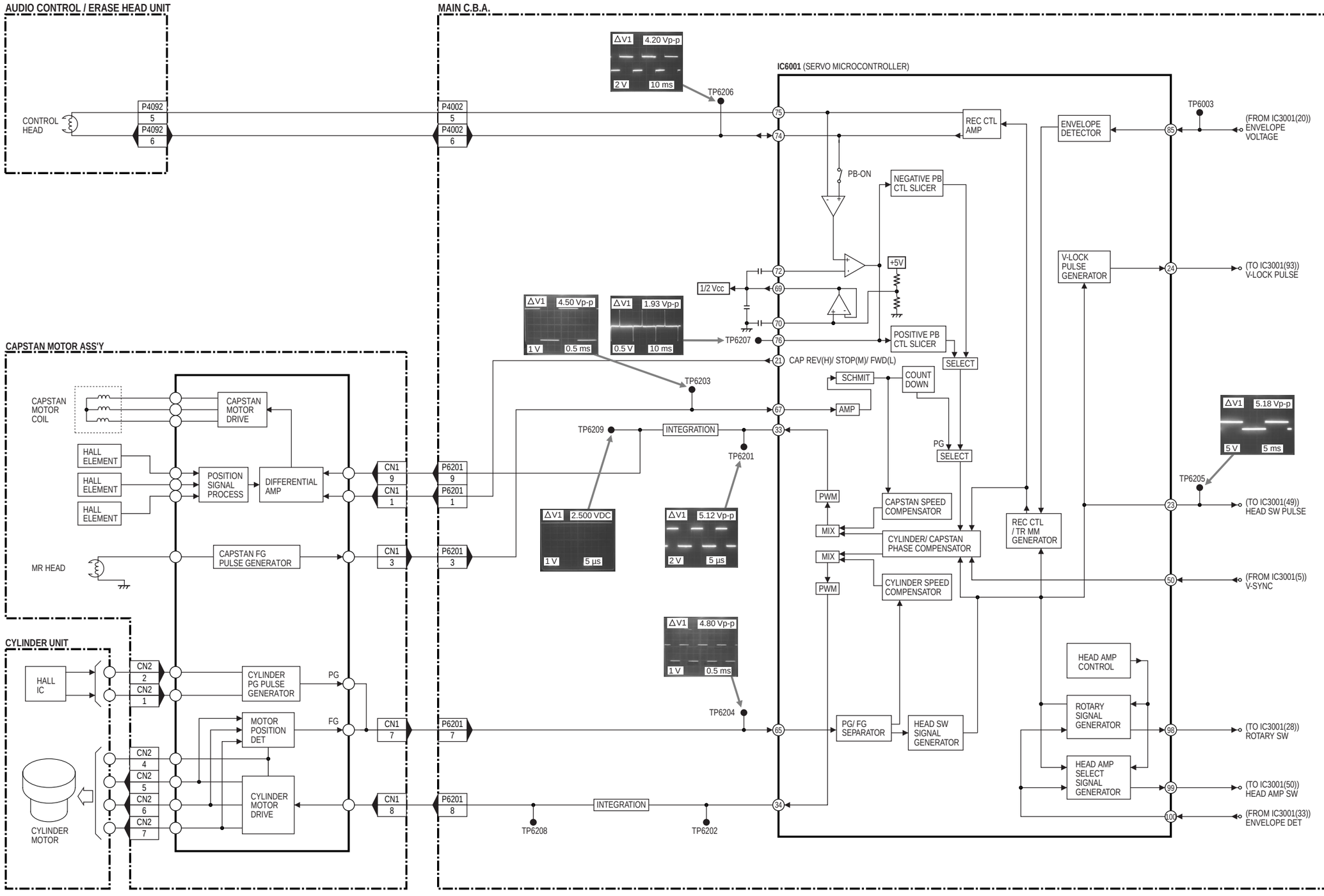
AUDIO SIGNAL PATH BLOCK DIAGRAM
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K

SYSTEM CONTROL BLOCK DIAGRAM



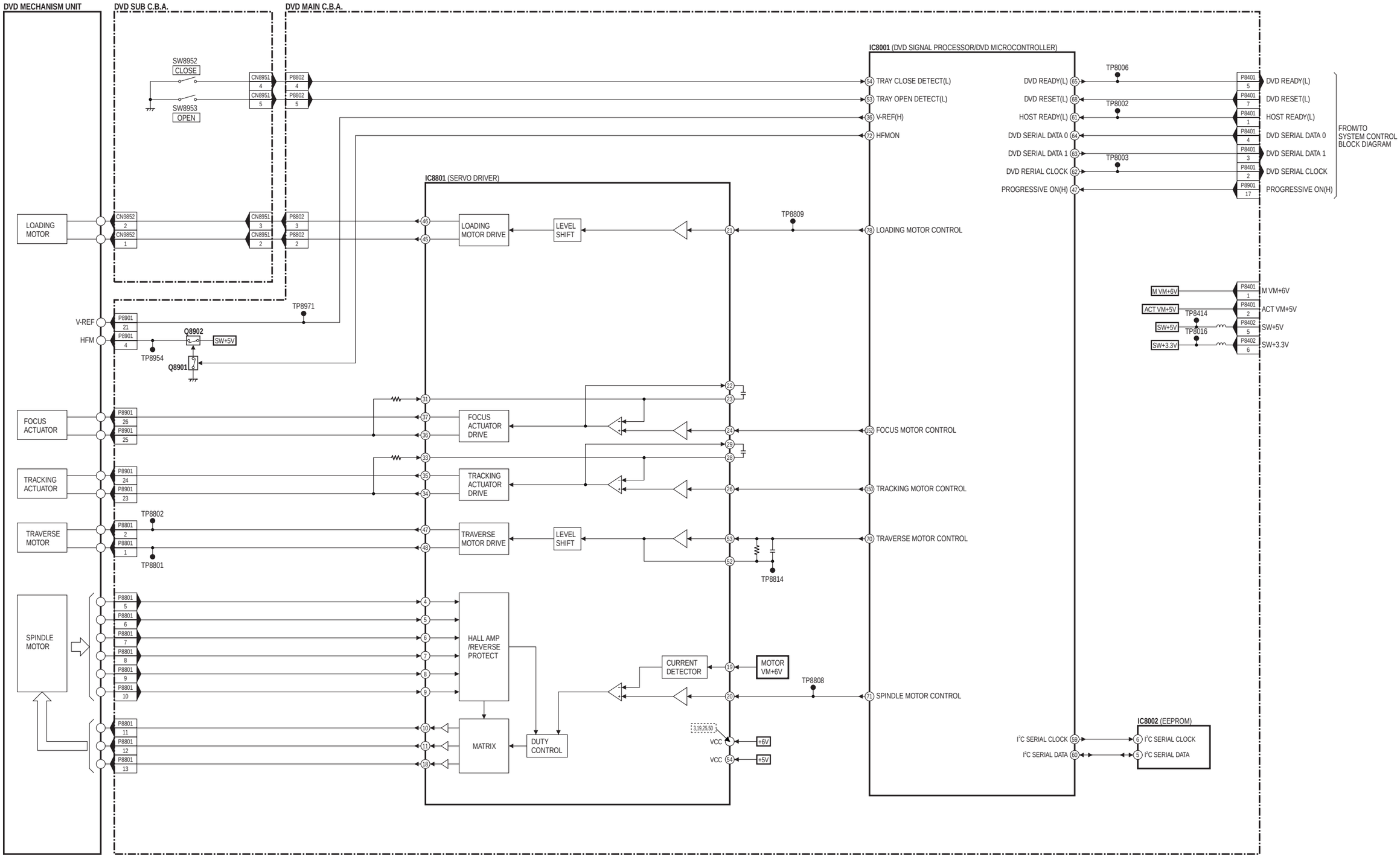
SYSTEM CONTROL BLOCK DIAGRAM
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K

SERVO BLOCK DIAGRAM



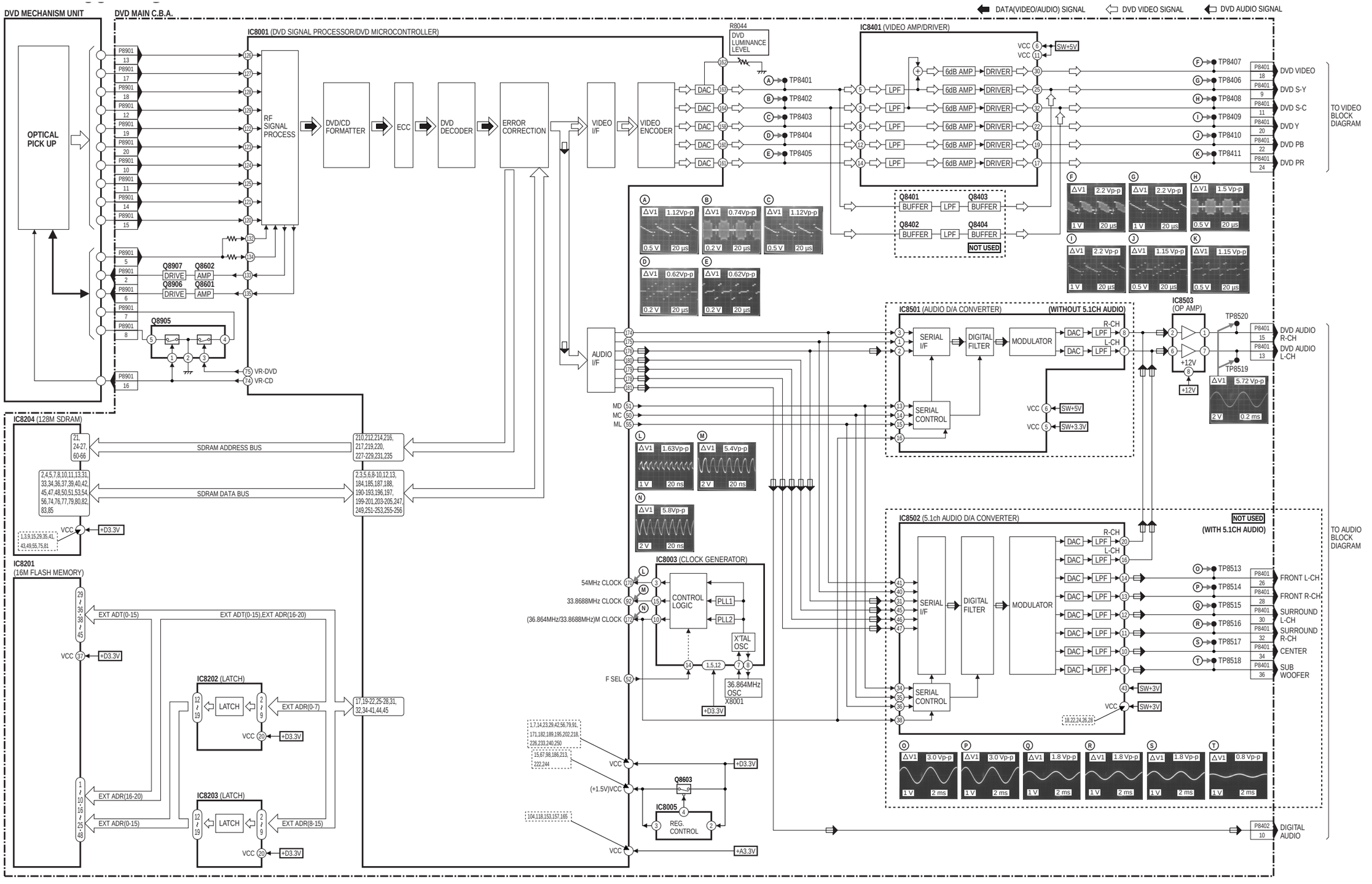
SERVO BLOCK DIAGRAM
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K

DVD I BLOCK DIAGRAM



DVD I BLOCK DIAGRAM
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K

DVD II BLOCK DIAGRAM



DVD II BLOCK DIAGRAM
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K

Troubleshooting Hints

How to confirm whether DVD circuit or other circuits is defective.

NOTE:
Host communication may not occur correctly between IC6001 on the Main C.B.A. and IC8001 on the DVD Main C.B.A. when there is a problem on the DVD Main C.B.A.
This is because the unit automatically switched to VCR mode after approx. 30 seconds even in DVD mode because the DVD Main C.B.A. shuts down. (Check the VCR mode indicator and DVD mode indicator on the Multi Function Display.) Check the voltage during the 30 seconds during which the unit remains in DVD mode.

1) Confirm DVD operation and VCR operation

1. Playback a VHS tape.
2. Playback a DVD disc.

Both NG → Main C.B.A. is defective. Repair the Main C.B.A.

No PB VCR only → Main C.B.A. is defective. Repair the Main C.B.A.

No PB DVD only →

First, confirm that the Main C.B.A. is O.K. other than DVD Mechanism Unit and DVD Main C.B.A. by referring to "Communication Timing Chart 1," and "Communication Timing Chart 2."
Check points:
1. All Power Supply Voltages for DVD circuit (TP8016 (SW_3.3V_DVD), TP8414 (SW_5V_DVD), Pin1 of P8402 (M_VM_6V), Pin2 of P8402 (ACT_VM_5V) on the DVD Main C.B.A.)
2. Output Signal from DVD Main C.B.A.(TP8006 (D_RDY)), Output Signal from Main C.B.A.(TP8002 (H_RDY)) (TP8006 (D_RDY), TP8002 (H_RDY) on the DVD Main C.B.A.)

NG → Main C.B.A. is defective. Repair the Main C.B.A.

Note:
If PR1502 on the Main C.B.A. becomes defective again after replacement, replace both DVD Mechanism Unit and IC8801 on the DVD Main C.B.A. at thesame time.

OK →

DVD circuit is defective.
Perform troubleshooting referring to "How to confirm whether DVD Mechanism Unit or DVD Main C.B.A. is defective."

How to confirm whether DVD Mechanism Unit or DVD Main C.B.A. is defective.

Confirm communication between DVD Main C.B.A. and Main C.B.A. by referring to "Communication Timing Chart 2."
Check points:
1. Output Signal from DVD Main C.B.A. (TP8003 (DVD_SCK) on the DVD Main C.B.A.)

NG → DVD Main C.B.A. is defective. Repair the DVD Main C.B.A.

IC8001 or the circuit around it is defective.

OK →

Confirm that the OPEN/CLOSE TRAY works correctly.

NG → DVD Mechanism Unit or IC8801 is defective. Repair it by referring to the "Cause: Tray Problem. "

OK →

Playback the test DVD disc.

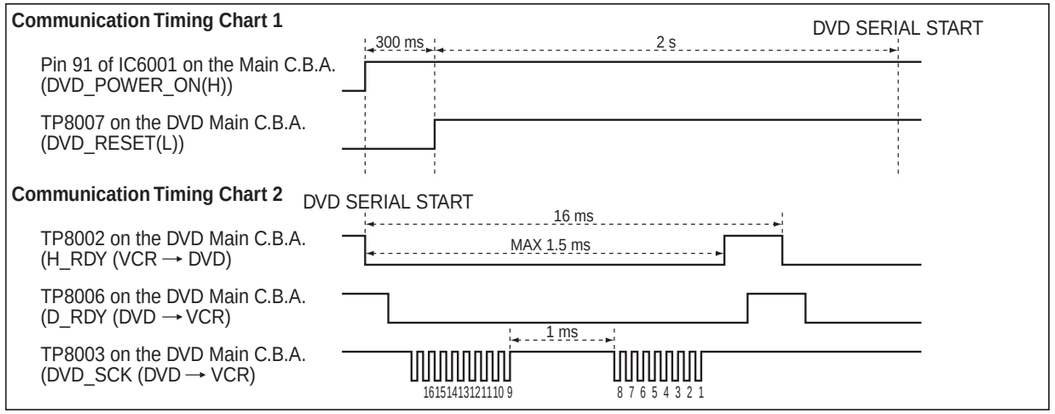
The Message "PLEASE CHECK THE DISC, AND FOR STAINS OR SCRATCHES ON DISC" appears. →

DVD Mechanism Unit or IC8801 or IC8001 is defective. Repair it referring to "Cause: Spindle Motor Problem," and "Cause: Traverse Problem," "Cause: Pickup Problem."

If there is problem with audio or picture, even though it plays back. →

DVD Main C.B.A. is defective. Repair DVD Main C.B.A.

Communication Timing Chart 1



Communication Timing Chart 2

Troubleshooting Hints of DVD Mechanism Unit

Cause: Tray Problem

Check the signal at Pin2 of CN9852 (+) on the DVD Sub C.B.A. (3.0 Vp-p)

OK → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.

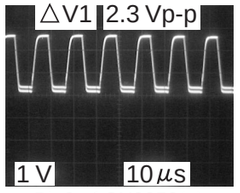
NG ↓

Check the signal at TP8809 (TRYIN) on the DVD Main C.B.A.

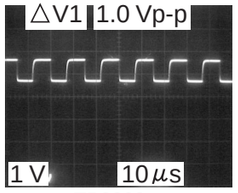
OK → IC8801 on the DVD Main C.B.A. is defective. Replace IC8801 on the DVD Main C.B.A.

NG ↓

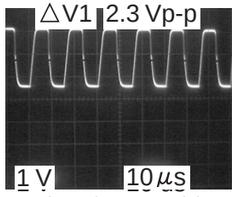
IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.



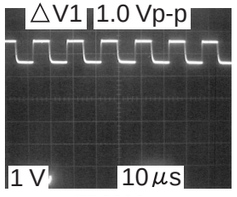
Pin2 of CN9852(+)
(During Loading)



TP8809
(During Loading)



Pin2 of CN9852(+)
(During Unloading)



TP8809
(During Unloading)

Cause: Spindle Motor Problem

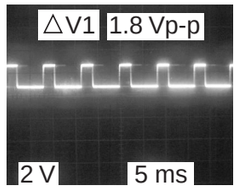
Check the signal at TP8808 (SPIN) on the DVD Main C.B.A.
- NG → IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.
- OK → Replace IC8801 on the DVD Main C.B.A.
  - Still NG → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.

Cause: Pickup Problem

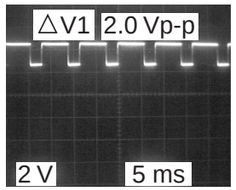
Check the voltage at TP8954 on the DVD Main C.B.A.
Is it +5.0 V ?
Check the voltage at TP8971 on the DVD Main C.B.A.
Is it +2.2 V ?
- NG → Replace the IC8801 on the DVD Main C.B.A.
- OK → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.
  - If the Message "PLEASE CHECK THE DISC, AND FOR STAINS OR SCRATCHES ON DISC" appears. → IC8801 on the DVD Main C.B.A. is defective. Replace IC8801 on the DVD Main C.B.A.
    - If the Message "PLEASE CHECK THE DISC, AND FOR STAINS OR SCRATCHES ON DISC" appears. → IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.

Cause: Traverse Problem

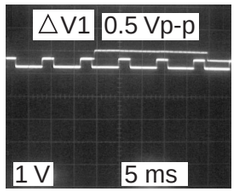
Check the signal at TP8801 and TP8802 on the DVD Main C.B.A.
- OK → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.
- NG → Check the signal at TP8814 on the DVD Main C.B.A.
  - OK → IC8801 on the DVD Main C.B.A. is defective. Replace IC8801 on the DVD Main C.B.A.
  - NG → IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.



TP8801



TP8802



TP8814

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MAIN C.B.A. (POWER SUPPLY/VIDEO/AUDIO SECTION)

MODE / PIN NO.	STOP
IC1001	
1	5.2
2	4.2
3	0.6
4	2.0
IC1002	
1	2.6
2	0
3	4.2
IC1501	
1	162.0
2	8.2
3	0
4	20.5
5	9.6
IC1502	
1	4.3
2	4.1
3	14.3
4	20.7
IC1503	
1	2.5
2	0
3	4.1
IC3001	
1	5.0
2	2.0
3	2.6
4	2.3
5	2.0
6	2.5
7	2.0
8	0
9	1.9
10	1.9
11	2.0
12	2.4
13	2.0
14	2.6
15	---
16	---
17	0
18	4.6
19	2.1
20	3.5
21	2.8
22	0
23	3.4
24	2.6
25	2.6
26	2.6
27	5.0
28	0.1
29	---
30	5.0

MODE / PIN NO.	STOP
31	1.8
32	0
33	4.9
34	---
35	1.9
36	5.0
37	2.6
38	2.6
39	2.6
40	2.6
41	0
42	2.6
43	2.6
44	2.6
45	2.6
46	5.0
47	5.0
48	0.1
49	0.1
50	0.4
51	2.6
52	2.5
53	0.3
54	5.0
55	2.6
56	2.6
57	2.6
58	0.2
59	0.2
60	0
61	0.2
62	0.2
63	2.6
64	5.0
65	0.3
66	0
67	2.6
68	2.6
69	0.2
70	0
71	0.2
72	0.2
73	0
74	0.2
75	0.2
76	0.3
78	0.3
79	0.3
80	0.4
81	0.3
82	0.3
83	0.4
84	5.0
85	0.4
86	---

MODE / PIN NO.	STOP
87	0.4
88	4.9
89	0.4
90	0.4
91	0.4
92	0.4
93	0.3
94	0.3
95	0.9
96	0.4
97	2.3
98	3.1
99	0.4
100	0.4
IC3002	
1	0.2
2	5.0
3	12.0
4	3.2
5	0
6	0
IC3101	
1	2.7
2	5.0
3	0
4	2.7
5	3.0
6	2.6
7	2.2
8	3.0
IC4201	
1	0.4
2	0
3	2.5
4	0
5	2.5
6	2.5
7	2.2
8	0.4
9	0
10	0
11	0
12	2.2
13	2.6
14	0
15	0
16	2.6
17	0.8
18	2.6
19	2.5
20	2.1
21	2.1
22	2.1
23	0
24	2.1

MODE / PIN NO.	STOP
25	5.0
26	2.1
27	0
28	3.8
29	1.5
30	0.8
31	0.1
32	2.5
33	2.5
34	0.7
35	2.5
36	0.1
37	1.7
38	0
39	---
40	5.0
41	0
42	4.9
43	4.9
44	0
45	0
46	0
47	2.5
48	2.3
49	0.4
50	3.6
51	5.0
52	3.6
53	6.0
54	2.5
55	0
56	0
57	6.0
58	12.0
59	0.2
60	0.2
61	2.5
62	2.5
63	2.8
64	0.6
IC4303	
1	7.7
2	7.7
3	7.6
4	-12.0
5	7.7
6	7.7
7	7.7
8	12.0
IC4304	
1	0
2	---
3	7.7
4	7.6
5	0

MODE / PIN NO.	STOP
6	0
7	-12.0
8	0
9	15.3
10	15.3
11	15.3
12	0
13	7.7
14	0
15	---
16	12.0
Q1001	
E	0
C	157.9
B	0.3
Q1002	
E	0
C	0.3
B	0.6
Q1051	
E	12.0
C	14.0
B	12.5
Q1052	
E	0
C	12.5
B	0.7
Q1053	
E	5.0
C	5.0
B	6.0
Q1070	
E	12.0
C	12.0
B	11.4
Q1071	
E	-30.0
C	-28.9
B	-28.3
Q1501	
E	0
C	0
B	0.7
Q1502	
S1	3.3
S2	3.3
S3	3.3
G	0
D1	3.3
D2	3.3
D3	3.3
D4	3.3
Q1503	
E	33.0

MODE / PIN NO.	STOP
C	1.5
B	33.0
Q1504	
E	0
C	32.9
B	0.5
Q1506	
E	6.0
C	11.2
B	1.5
Q1509	
E	0
C	1.3
B	0
Q1510	
E	5.0
C	10.5
B	1.4
Q1511	
E	0
C	1.4
B	0
Q3002	
E	2.7
C	0
B	2.0
Q3003	
E	2.0
C	5.0
B	2.7
Q4001	
E	5.0
C	5.2
B	4.5
Q4002	
E	0
C	0
B	0.8
Q4003	
E	0
C	0
B	0.8
Q4012	
E	0
C	-1.2
B	0
Q4304	
E	0
C	15.3
B	0
Q4306	
E	0
C	12.0
B	0

MODE / PIN NO.	STOP
TP1001	0
TP1002	33.0
TP1003	14.0
TP1005	5.0
TP1006	5.0
TP1007	0
TP1009	0
TP1050	5.0
TP1058	12.0
TP1070	-12.0
TP1071	-30.0
TP1511	0.1
TP3001	3.9
TP3002	2.8
TP3003	2.0
TP3004	3.4
TP3005	0.1
TP3006	2.5
TP3007	2.0
TP3008	3.4
TP3009	0
TP3010	5.0
TP3011	0.4
TP3101	2.7
TP3102	3.0
TP3103	1.9
TP3151	2.3
TP3401	0
TP4002	0
TP4011	0
TP4101	0
TP4102	0
TP4103	0
TP4201	0
TP4202	0
TP4203	0
TP4204	0
TP4205	1.5
TP4206	3.8
TP4207	0.8
TP4208	0.4
TP4209	0
TP4210	0
TP8521	6.0
TP8522	6.1
TP8523	0
TP8524	6.1
TP8525	0
TP8526	6.0

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

MAIN C.B.A. (SYSTEM CONTROL/SERVO SECTION)

MODE / PIN NO.	REC	PLAY
IC6001		
1	5.2	5.2
2	0.4	3.7
3	1.0	4.4
4	1.2	2.9
5	4.9	4.9
6	---	---
7	---	---
8	1.2	3.8
9	1.2	3.8
10	1.1	3.7
11	1.1	5.1
12	1.1	1.2
13	1.1	2.3
14	5.1	4.8
15	5.1	4.9
16	0.8	4.8
17	4.9	4.8
18	0.8	4.9
19	0.1	1.6
20	5.1	4.7
21	0.9	4.8
22	0.9	4.8
23	0.9	4.9
24	0.9	4.9
25	0.9	4.3
26	0	0
27	0	2.6
28	5.2	0
29	4.5	4.6
30	0	0
31	0	4.2
32	0	4.4
33	2.7	2.7
34	2.7	2.7
35	0.4	1.8
36	3.0	2.0
37	3.0	2.4
38	3.0	2.6
39	0	0
40	2.5	0
41	2.5	0
42	2.5	0
43	2.5	0.9
44	2.5	2.4
45	2.5	0
46	---	---
47	2.5	2.1
48	0	0
49	1.9	2.1
50	2.1	2.8
51	5.0	5.0
52	2.6	0.5
53	3.1	2.3
54	0	0.1

MODE / PIN NO.	REC	PLAY
55	3.4	0
56	3.5	4.9
57	2.8	3.8
58	2.3	1.3
59	2.6	1.1
60	2.3	4.6
61	---	---
62	---	---
63	---	---
64	---	---
65	0.2	0.9
66	---	---
67	1.0	2.4
68	0	0
69	2.6	2.6
70	2.6	2.6
71	0	0
72	2.6	2.7
73	5.2	5.2
74	3.0	1.2
75	0.2	1.7
76	2.6	2.6
77	---	---
78	5.2	5.2
79	4.5	4.5
80	2.5	2.5
81	2.3	2.3
82	1.3	1.3
83	1.4	1.4
84	1.6	1.6
85	1.0	1.0
86	1.6	1.6
87	1.6	1.6
88	1.6	1.6
89	3.8	3.8
90	1.5	1.5
91	1.5	1.5
92	1.4	1.4
93	---	---
94	---	---
95	1.3	1.3
96	4.9	4.9
97	1.4	1.4
98	0.9	0.9
99	1.5	1.5
100	4.5	4.5
IC6002		
A	1.2	1.2
K	0	0
E	0	0
C	5.3	5.3
IC6003		
A	2.4	2.4
K	1.2	1.2
E	0	0

MODE / PIN NO.	REC	PLAY
C	0.2	0.2
IC6004		
1	0	0
2	5.0	5.0
3	0	0
IC6005		
1	0	0
2	0	0
3	0	0
4	0	0
5	4.9	4.9
6	4.9	4.9
7	0	0
8	5.0	5.0
Q6001		
E	0	0
C	5.2	5.2
B	0	0
Q6002		
E	12.0	12.0
C	12.0	12.0
B	12.0	12.0
Q6003		
E	4.6	0
C	12.0	12.0
B	5.2	0
Q6005		
E	5.0	5.0
C	5.0	5.0
B	4.5	4.5
Q6006		
E	0	0
C	0.1	0.1
B	0.8	0.8
Q6009		
E	0	0
C	5.2	5.2
Q6010		
E	0	0
C	5.2	5.2
TP6001	5.2	5.3
TP6002	2.6	0.2
TP6003	3.5	2.9
TP6004	5.4	5.2
TP6005	5.2	5.2
TP6007	0	0
TP6008	0	0
TP6009	5.0	5.0
TP6010	4.9	4.9
TP6011	4.9	4.9
TP6017	0	0
TP6018	5.3	5.3
TP6019	0	0

MODE / PIN NO.	REC	PLAY
TP6101	0.1	0.1
TP6102	5.2	5.2
TP6103	5.3	5.3
TP6104	0.1	0.1
TP6105	0.2	5.2
TP6106	5.2	5.2
TP6107	0	0
TP6201	2.7	2.7
TP6202	2.7	2.7
TP6203	2.4	2.4
TP6204	1.4	1.4
TP6205	2.6	2.6
TP6206	3.0	2.6
TP6207	2.6	2.6
TP6208	2.6	2.6
TP6209	2.7	2.7

OPERATION II C.B.A.

MODE / PIN NO.	REC	PLAY
Q6601		
E	0	0
C	4.9	4.9
B	0.1	0.1

VOLTAGE CHART
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

DVD MAIN C.B.A.

MODE / PIN NO.	STOP
IC8001	
1	3.3
2	---
3	---
4	0
5	---
6	---
7	3.3
8	---
9	---
10	---
11	0
12	---
13	---
14	3.3
15	1.5
16	0
17	3.4
18	3.4
19	---
20	---
21	---
22	---
23	3.3
24	0
25	0.4
26	0.9
27	---
28	---
29	3.3
30	0
31	---
32	---
33	2.2
34	---
35	---
36	---
37	---
38	0.3
39	0.1
40	---
41	---
42	3.3
43	0
44	---
45	---
46	2.0
47	---
48	---
49	---
50	3.4
51	3.4
52	---
53	3.4
54	3.4

MODE / PIN NO.	STOP
55	3.3
56	3.3
57	0
58	0
59	3.3
60	3.4
61	3.1
62	---
63	3.4
64	---
65	0.1
66	1.2
67	1.6
68	3.4
69	0
70	1.7
71	2.4
72	---
73	---
74	---
75	3.4
76	---
77	---
78	0.1
79	3.3
80	0
81	---
82	---
83	---
84	---
85	---
86	---
87	---
88	---
89	---
90	---
91	3.3
92	1.7
93	0
94	---
95	3.4
96	3.4
97	3.4
98	1.6
99	0
100	---
101	---
102	---
103	---
104	3.3
105	0.9
106	0
107	0.8
108	1.6
109	2.1

MODE / PIN NO.	STOP
110	2.6
111	2.0
112	0.7
113	2.1
114	1.8
115	1.4
116	0.3
117	1.6
118	3.3
119	0
120	1.9
121	1.9
122	2.4
123	2.4
124	2.4
125	2.4
126	2.0
127	2.0
128	2.0
129	2.0
130	2.2
131	2.3
132	0.4
133	1.2
134	0.4
135	0.2
136	2.3
137	1.7
138	0
139	1.7
140	1.7
141	1.7
142	1.7
143	0.5
144	1.6
145	3.3
146	1.8
147	---
148	---
149	3.3
150	1.7
151	0
152	1.7
153	3.3
154	1.4
155	0
156	2.2
157	3.3
158	0.7
159	0
160	0.5
161	0.5
162	1.4
163	---
164	0.9

MODE / PIN NO.	STOP
165	3.3
166	1.5
167	0
168	2.1
169	0
170	0.8
171	3.3
172	1.6
173	---
174	1.8
175	1.7
176	1.4
177	0
178	---
179	---
180	---
181	1.7
182	3.3
183	0
184	---
185	---
186	1.5
187	---
188	---
189	3.3
190	---
191	---
192	---
193	---
194	0
195	3.3
196	---
197	---
198	0
199	---
200	---
201	---
202	3.3
203	---
204	---
205	---
206	0
207	2.4
208	2.4
209	3.3
210	---
211	0
212	---
213	1.5
214	---
215	0
216	---
217	---
218	3.3
219	---

MODE / PIN NO.	STOP
220	---
221	0
222	1.5
223	1.9
224	0
225	1.9
226	3.3
227	---
228	---
229	---
230	0
231	---
232	3.3
233	3.3
234	1.6
235	---
236	0
237	1.7
238	3.0
239	3.3
240	3.3
241	0
242	3.2
243	2.4
244	1.5
245	0
246	2.4
247	---
248	0
249	---
250	3.3
251	---
252	---
253	---
254	0
255	---
256	---
IC8002	
1	0
2	0
3	0
4	0
5	3.3
6	3.2
7	0
8	3.3
IC8003	
1	3.3
2	0
3	0.3
4	1.7
5	3.3
6	0
7	1.5
8	1.4

MODE / PIN NO.	STOP
9	---
10	1.6
11	0
12	3.3
13	---
14	0.1
15	1.6
16	3.3
IC8005	
1	0
2	2.7
3	1.5
4	1.2
5	0
IC8201	
1	0.5
2	0.6
3	1.0
4	0.8
5	2.0
6	1.3
7	0
8	1.1
9	0.1
10	0.1
11	3.3
12	3.1
13	---
14	3.3
15	0.1
16	3.3
17	3.3
18	3.3
19	0.1
20	0
21	3.3
22	0.1
23	3.3
24	0
25	2.9
26	1.9
27	1.7
28	0.7
29	3.3
30	3.3
31	0.1
32	0.1
33	0.1
34	0.1
35	0.1
36	0.1
37	3.3
38	3.3
39	3.3
40	3.3

MODE / PIN NO.	STOP
41	0.1
42	3.3
43	1.0
44	3.3
45	3.3
46	0
47	3.3
48	0.6
IC8202	
1	0.1
2	2.9
3	0.1
4	3.3
5	3.3
6	1.2
7	3.3
8	3.3
9	3.3
10	0
11	0.1
12	0.1
13	0.1
14	0.1
15	0.1
16	0
17	0.1
18	0.1
19	0.1
20	3.3
IC8203	
1	1.4
2	3.3
3	0.1
4	0.1
5	0.4
6	0.1
7	0.1
8	0.1
9	0.4
10	0
11	0.1
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	3.3
IC8204	
1	3.3
2	1.4
3	3.3
4	2.0

MODE / PIN NO.	STOP
5	1.7
6	0
7	2.0
8	2.7
9	3.0
10	2.0
11	2.0
12	0
13	2.6
14	---
15	3.3
16	2.1
17	3.2
18	3.1
19	3.2
20	3.0
21	0.1
22	1.5
23	1.6
24	0.1
25	0.1
26	0.3
27	0.4
28	0.4
29	3.3
30	---
31	2.6
32	0
33	2.0
34	2.0
35	3.3
36	2.0
37	2.7
38	0
39	2.0
40	2.0
41	3.3
42	2.3
43	3.3
44	0
45	0.1
46	0
47	0.1
48	0
49	3.3
50	0.1
51	0
52	0
53	0
54	0.1
55	3.3
56	0
57	---
58	0
59	0

MODE / PIN NO.	STOP
60	0
61	0
62	0
63	0
64	0
65	0
66	0
67	0.1
68	0
69	---
70	---
71	0.1
72	0
73	---
74	0.1
75	3.3
76	2.4
77	2.4
78	0
79	2.4
80	2.9
81	3.3
82	0.1
83	2.4
84	0
85	0.1
86	0
IC8401	
1	2.1
2	4.9
3	0.6
4	0
5	2.4
6	5.0
7	0
8	2.4
9	0
10	1.8
11	5.0
12	1.9
13	0
14	0.1
15	4.9
16	0
17	2.4
18	---
19	2.4
20	0
21	1.8
22	1.7
23	0
24	1.8
25	1.7
26	0
27	1.8

MODE / PIN NO.	STOP
28	0
29	1.7
30	1.7
31	0
32	2.4
IC8501	
1	1.7
2	0.1
3	1.7
4	0
5	3.3
6	5.0
7	0.1
8	0.1
9	0
10	0
11	---
12	---
13	1.6
14	0.4
15	3.3
16	0.3
IC8503	
1	6.2
2	1.0
3	6.2
4	0
5	6.0
6	6.0
7	0.1
8	12.0
IC8801	
1	2.3
2	5.9
3	6.1
4	5.9
5	5.9
6	5.9
7	0.1
8	5.9
9	5.9
10	2.7
11	2.7
12	0
13	0
14	0
15	0
16	0
17	0
18	2.7
19	6.1
20	1.7
21	0.8
22	0.5
23	0.9

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MODE / PIN NO.	STOP
24	1.0
25	6.1
26	1.0
27	1.7
28	0.9
29	0.6
30	0.8
31	0.8
32	5.0
33	0.8
34	0.8
35	0.8
36	0.7
37	0.7
38	0
39	0
40	0
41	0
42	0
43	0
44	0
45	0.9
46	0.9
47	0.8
48	0.8
49	0.1
50	6.0
51	0.1
52	1.7
53	1.7
54	5.0
Q8601	
E	0
C	0.1
B	0.2
Q8602	
E	0
C	0.1
B	0.3
Q8603	
E	0.6
C	1.5
B	0.6
Q8901	
E	0
C	3.9
B	0.3
Q8902	
E	5.0
C	5.1
B	0.1
Q8905	
1	0.5
2	0

MODE / PIN NO.	STOP
3	0.2
4	0.1
5	0.1
Q8906	
E	0.1
C	0
B	0
Q8907	
E	5.1
C	0
B	5.1
TP8001	0.1
TP8002	0.1
TP8003	0.1
TP8004	3.3
TP8005	0.1
TP8006	0.1
TP8007	3.1
TP8008	3.3
TP8009	3.3
TP8010	0.1
TP8011	3.3
TP8012	0.2
TP8013	0
TP8014	0.3
TP8015	1.4
TP8016	0
TP8017	0
TP8018	0.4
TP8019	4.4
TP8401	0.3
TP8402	1.0
TP8403	0.4
TP8404	0.5
TP8405	0.4
TP8406	0
TP8407	1.1
TP8408	0.4
TP8409	0.1
TP8410	1.8
TP8411	1.8
TP8412	5.0
TP8413	5.0
TP8414	2.9
TP8415	12.1
TP8416	0
TP8501	0.1
TP8502	0.8
TP8503	0
TP8504	0.3
TP8505	0
TP8506	3.3
TP8507	3.1
TP8508	3.3

MODE / PIN NO.	STOP
TP8509	0.1
TP8510	1.7
TP8511	0
TP8512	0
TP8513	2.6
TP8514	2.0
TP8515	2.6
TP8516	2.5
TP8517	2.6
TP8518	2.0
TP8519	0
TP8520	0
TP8521	1.9
TP8601	3.3
TP8602	0.1
TP8603	3.3
TP8604	0.1
TP8605	1.6
TP8606	0.1
TP8607	0.1
TP8608	0.1
TP8609	0.1
TP8610	0.1
TP8611	0
TP8612	0.1
TP8613	3.3
TP8614	2.9
TP8615	0
TP8616	0
TP8617	1.0
TP8618	0
TP8619	0.1
TP8620	1.8
TP8621	2.0
TP8622	2.0
TP8623	0.1
TP8624	0.1
TP8625	3.3
TP8626	0.1
TP8627	0.1
TP8801	0.7
TP8802	0.5
TP8803	0
TP8804	0.9
TP8805	0.1
TP8806	2.4
TP8807	0.1
TP8808	0.7
TP8809	0.6
TP8810	1.5
TP8811	1.6
TP8812	2.6
TP8813	3.0
TP8814	-2.6
TP8815	-1.9

DVD SUB
C.B.A.

MODE / PIN NO.	STOP
TP8816	0.6
TP8817	0.6
TP8818	0.2
TP8819	0.6

MODE / PIN NO.	STOP
TP8954	0.6
TP8955	0.7

VOLTAGE CHART
PV-D4733S/PV-D4743/PV-D4743S/PV-D4743S-K